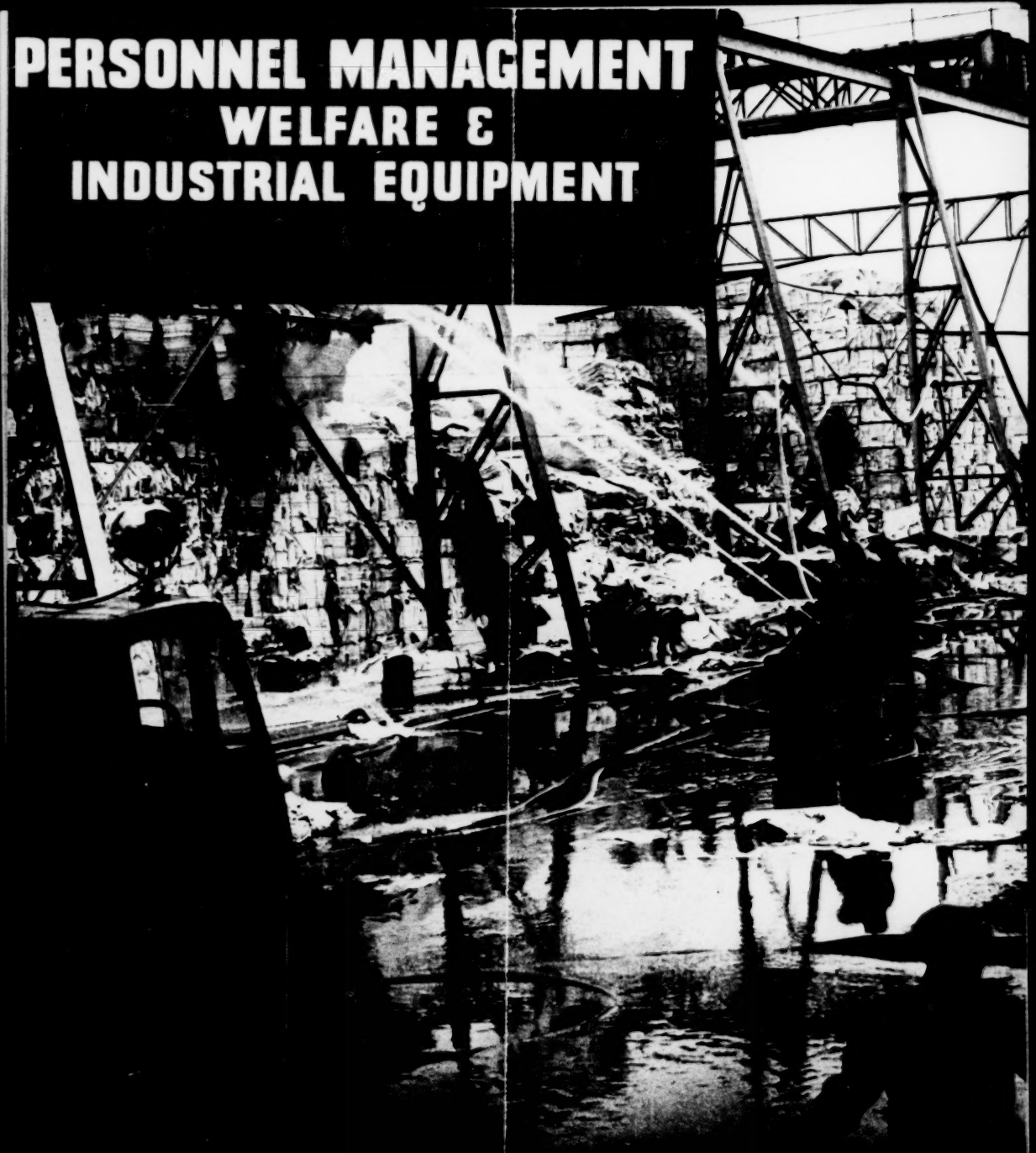
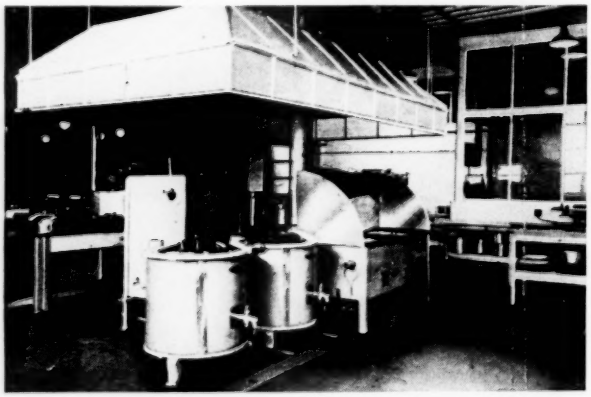
# PERSONNEL MANAGEMENT
## WELFARE & INDUSTRIAL EQUIPMENT



*Equipment For Fire Fighting* - SEE PAGE 243

## GIVE UP SMOKING? I NEVER STARTED! says Mr. Therm

Gas burnt in Mr. Therm's gas-heated appliances never produces the slightest smut or smoke. It is so clean in operation that gas equipment is kept hard at it with complete success in many places where almost surgical cleanliness is essential; and the maintenance of the equipment is confined to an easily handled minimum. The other advantages of gas as a fuel—flexibility, ease of control, rapid heating from cold and high efficiency—are so well known that Mr. Therm's face is familiar in factories all over Britain.



Here is gas doing a real job, with scrupulous cleanliness, in the industrial canteen of Joshua Hoyle & Sons Ltd., Rochdale. The equipment comprises fish frying range, steaming oven, cooking range, two 20-gallon boiling pans, dish washing machine and the usual labour-saving devices. The kitchen serves about 250 two-course lunches in 10 minutes each day.

**MR. THERM BURNS TO SERVE YOU!** THE GAS COUNCIL • 1 GROSVENOR PLACE • LONDON • SW1

ACTUALLY WE DON'T RECOMMEND THIS EXPERIMENT, because even solid Stainless Steel can be dented. But that's about all the harm you can do to Olde Hall Tableware! No cracking, chipping or smashing, for instance, and no soldered parts to break off. So think of the saving in replacement costs when you equip with "Olde Hall".

As to appearance, "Olde Hall" has it on all counts. Beautiful designs, in modern or traditional styles; no plating to wear away; and a surface which comes up like diamonds as you dry it—year after year.

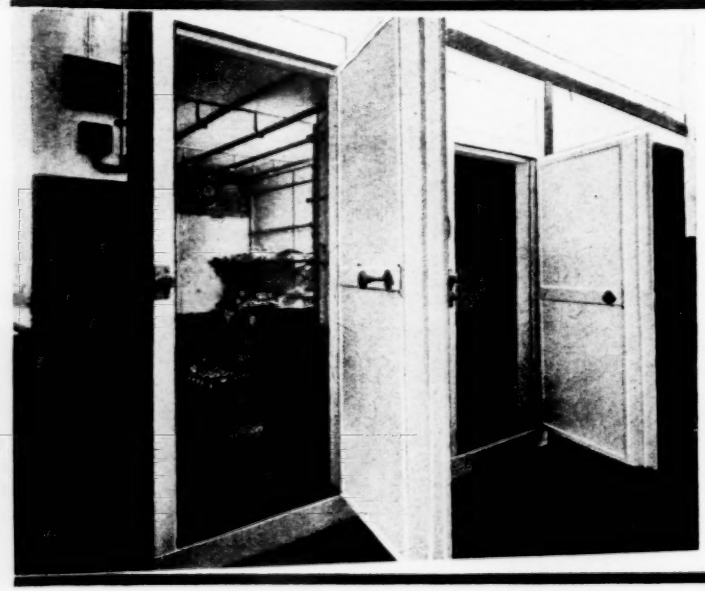
Note again, "Olde Hall" is untarnishable (important in Vegetable Dishes), and the vessels for hot liquids have ingenious "Staycool" handles which really do not get hot.

Handsome, hygienic, almost indestructible, and a joy to clean, "Olde Hall" brightens the lives of all concerned—management, staff and workers.

Olde Hall

STAINLESS STEEL *Tableware*

J. & J. WIGGIN LIMITED · 2 WOODHALL STREET · BLOXWICH · WALSALL



# fresher than yours?

**Midland Refrigerator Ltd.,** Birmingham, installed these dual fish and food cabinets in the canteen kitchen at Morris Motors Ltd., Coventry. And because they are refrigerated—and with a Coldrator installation—the foods will keep fresher, and the refrigeration system be better than yours.

For all Coldrator distributors are members of a servicing organization that employs some of Britain's finest refrigeration engineers and covers every county in the United Kingdom—your district included. These technicians keep every single Coldrator installation in perfect running order, year in, year out, so ensuring that each operates for all time at the high peak of efficiency for which it was made

400 cu. ft. cold store cooled by two Coldrator plate type evaporators coupled to a 1-h.p. Coldrator model CM52A twin cylinder compressor. 30-stone fish compartment with Coldrator fin-type evaporator coupled to 1/3 h.p Coldrator compressor model A325

# COLDRATOR

ensures good service

**INTERNATIONAL REFRIGERATOR COMPANY LIMITED**
**Peterborough**
**England**

Member of the AEI group of companies

# How to cut absenteeism

The main cause of lost time in industry, according to the Medical Research Council, is sickness absence. Much of this absenteeism can be traced to the transmission of contagious ailments through the use of communal towels. After washing, hands should be dried on a clean, fresh, fluff-free paper towel—an immaculate towel like Hi-Dri, designed to be used once, then thrown away!

**ROLLER TOWELS MEAN WAITING and CONGESTION**
—Lost Man Hours—Transmission of Germs—Expensive Laundry Bills

**MOISTURE MAGNET!**
Hi-Dri towels absorb every drop of moisture. Will not disintegrate when wet.

*DISPENSER CABINETS SUPPLIED FREE ON LOAN*

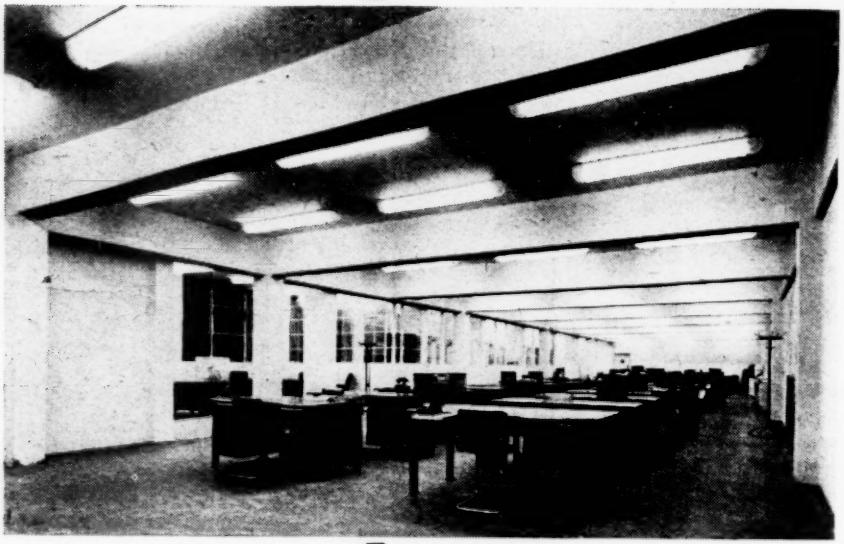
**Hi-Dri**
**PAPER TOWELS**

WITHOUT OBLIGATION
*Write or phone today for details or ask for a demonstration of Hi-Dri paper towels and further proof that they can help you cut absenteeism!*

HYGIENE PRODUCTS (Gt. Britain) LTD., 11 Grosvenor Gardens, Westminster, London, S.W.1
Telephone: VICtoria 1951/2

## SO ADAPTABLE

**it meets every lighting need**



## SO UP-TO-DATE

**it aids efficiency**

The efficiency of Osram fluorescent lighting such as this can be most effectively adapted to every lighting need. Its bright attractiveness welcomes the visitor in public rooms, its clear modern light aids the staff in every department.

G.E.C. illuminating engineers will gladly check your existing lighting. Expert advice is freely available for new installations.

If you already have fluorescent lighting, your old lamps may not be giving full value for current consumed. Replace them with OSRAM fluorescent lamps.

Osram

**FLUORESCENT LIGHTING with G.E.C. fittings**

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

INSTALL

# PETER'S

**E**QUIPMENT
**T**O
**E**NSURE
**R**EGULAR
**S**UPPLIES
of SANITARY
TOWELS

(Soluble and Non-Soluble
—Choice of Brands)

**PETER'S AUTOMATIC MACHINES LTD**
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# Green's of BRIGHTON

BRITISH FOOD PRODUCTS OF QUALITY
for

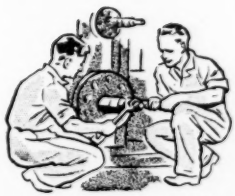
# CANTEEN CATERING

CUSTARD POWDER
BLANC MANGE POWDERS (Assorted & Chocolate Flavours)
CORNFLOUR
SPONGE CAKE & PUDDING FLOUR MIXTURE
DESSERT GELATINE UNSWEETENED
BAKING POWDER
ROASTEX (Gravy Powder)
GRAVY SALT
YORKSHIRE PUDDING, PANCAKE & FRITTER
FLOUR MIXTURE

cked in special bulk quantities by GREEN'S of BRIGHTON
Makers of Green's Sponge Mixture
*ntractors to H.M. Government, County Councils, Institutions, etc.*
*Samples are available on application to:*

**H. J. GREEN & CO. LTD**
BULK SALES DEPT. BRIGHTON

BRIGHTON H. J. GREEN & CO. LTD ENGLAND



*Workers carry on working safely in oil, water, grease when cuts and abrasions are protected by Waterproof Elastoplast dressings.*

# THIS OUTFIT CUTS LOSS OF MAN-HOURS

**114 WATERPROOF DRESSINGS**
*are contained in this Outfit*

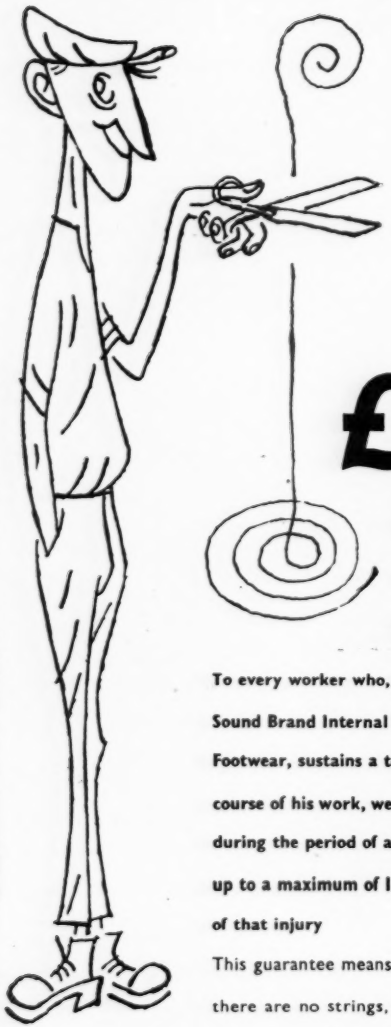
| | | | | | |
|---|---|---|---|---|---|
| A | 12 | 3" x 2" | D | 36 | 2½" x 1" |
| B | 12 | 1½" x 1½" | E | 36 | 1½" x 1" |
| C | 18 | Patchettes | | | |

**REFILLS:** *Unit Packs contain* **12, 3" x 2"** *dressings,* **36** *dressings in each of the other sizes and also* **36, 3" x 1"** *dressings.*

*Your First Aid Room* is the place for this tin. It is the Medical and Factory First Aid Outfit containing 114 waterproof dressings made to the Elastoplast standard of quality. No water, grease, oil or dirt gets through, or under these dressings. Therefore workers with cut fingers, grazed knuckles and similar minor injuries can return from the First Aid Room to the wettest, oiliest or dirtiest job with complete safety. Waterproof Elastoplast dressings keep cuts dry and save man-hours for the firm. *Order the Medical and Factory First Aid Outfit from your usual wholesaler or write direct to the makers.*

*WATERPROOF*
# Elastoplast
TRADE MARK

MADE BY T. J. SMITH & NEPHEW LTD., HULL



# £50

## and no strings

**To every worker who, while wearing Sound Brand Internal Steel Toe Safety Footwear, sustains a toe injury in the course of his work, we will pay £5 a week during the period of absence from work up to a maximum of 10 weeks as a result of that injury**

This guarantee means just what it says: there are no strings, no 'conditions' to Sound Brand Protection

★ Write for leaflets to

**Sound Boots Limited**

**SOUNDWELL BRISTOL**

Obtainable from
**Messrs L Elkan Ltd Stepney Bank Newcastle-on-Tyne**
**Messrs H C Smith Ltd 31 Dale St Manchester**

★ *give her charm* ★

**not overalls but**

*Overgowns!*

A Tailor-made protective garment providing an operative style for industry. Note the roomy skirt pockets, detached belt, semi-fitted back and action-free knife pleated skirt, and then ask yourself if you can afford to be without this extra over-gown efficiency

***she'll work best if she's well dressed***

# supercraft

## OF OLDHAM

*Stylists of Occupational Overgowns*

**SUPERCRAFT (GARMENTS) LTD.**

**Alliance Mill, Oldham, Lancashire, Eng.**

*Telephone:* Main 3795 *Telegrams:* Supercraft, Oldham

# BUILT FOR PROTECTION against foot injuries

**Totectors boots and shoes have made a big stride forward in reducing foot injuries amongst workers in all industries where foot accidents have been all too prevalent. Here are four concrete reasons why "Totectors" stand up to the job :—**

1 **Neatly concealed "Totectors" steel toe cap withstands a static weight of 3 tons.**

2 **Special Padded Tongue affords additional protection to the instep.**

3 **Quality leather uppers and leather lined throughout.**

4 **Solid leather soles and heels. Also available with rubber soles and heels.**

***We welcome Home and Overseas visitors to our London Showrooms, 52 Woburn Place, W.C.1***

*Obtainable only from*

WILKINS & DENTON (London) Ltd.

Reg'd. Trade Mark

**TOTECTORS**

★ *You can make these safety boots and shoes available to your staff at manufacturer's prices. Write for full particulars.*

Granville Sq., King's Cross Rd., London, W.C.1

---

*"FIRST CHOICE FOR FIRST AID"*

# Adaptoplast

## INDUSTRIAL FIRST AID DRESSINGS

On the left is the MOST CONVENIENT PACK of dressings. A complete outfit of 126 ready-cut plasters of 8 assorted sizes and shapes, ready for immediate use for everyday Industrial First Aid Requirements. Size 8 in. x 4 in. x 2½ in. Stock box No. M. 298. Refills (complete or part) are quickly obtainable.

Shown on the right is our NEW DISPENSER PACK for 5-yard rolls. This is undoubtedly the MOST ECONOMICAL WAY to buy First Aid Dressings. The dressing feeds through a slot and the exact size required can be cut off. Available in widths of 1½ in., 2 in., 2½ in., and 3 in.

Made by the pioneers of Industrial First Aid. Prices and any further details required will be supplied with pleasure.

A PRODUCT OF

**Cuxson Gerrard & Co. Ltd.**

OLDBURY BIRMINGHAM

# This legging has the right ideas

**LOOK AT ITS SIX**

**SAFETY/COMFORT FEATURES**

This new Safety Products Legging has been specially designed to give comfortable protection to foundrymen, welders — anyone exposed to the risk of leg or foot-burns.

The Legging has a springframe with a detachable cover of good quality asbestos cloth. It works like this:

1. ADJUSTABLE FIT. The spring is designed to adjust itself to the size of the leg, ensuring a comfortable fit.
2. RIGID COVER. The spring holds the cover rigid: the asbestos cannot crumple or move out of position.
3. COOLNESS. The legging is pleasantly cool to wear: the asbestos does not touch the leg at all.
4. QUICK REMOVAL. These leggings need no fasteners (though snap fasteners are provided if preferred): there is no under-foot strap. If hot metal falls on the legging, it can be removed in an instant, before the heat can reach the skin.
5. FOOT SAFETY. The reinforced spat front cannot curl: it gives full protection always to the top of the foot.
6. ECONOMY. The covers are easily replaced when necessary: the spring gives long service and outlasts many replacement covers.

*OBTAINABLE NOW FROM DEPT. A.8*

**SAFETY PRODUCTS LTD.**

44 HATTON GARDEN, LONDON, E.C.1, ENGLAND

*Sole distributors in Great Britain for Willson Products Inc., Reading, Pa., U.S.A.*

# Pyjamas... or no pyjamas? that *is the question!*

Here is the case for *not* carrying pyjamas . . . for tycoons who merely want to carry business papers in the handsomest possible way. This 16 in. by 11 in. polished brown leather case has a "cradle" for newspaper or "mac.," and a handy ticket pocket, *outside*; a pocket for visiting cards, and a rack for emergency pencils, *inside*.

Four models: HX.2—two compartments, £4 2s. 6d. HXZ.2—ditto, with zip back pockets, £5 2s. HX.3—three compartments, £4 11s. 6d. HXZ.3—ditto, with zip back pocket, £5 12s. Post free. (In U.S.A., $14.00, $16.75, $15.25 and $18.25, respectively. Carriage and insurance free.).

. . . And here is the case for leading a double life: a capacious carrier of important papers (two compartments for foolscap folders), with a private zipped-off compartment for pyjamas and overnight gear, *and* a roomy outside zip pocket. This golden tan hog-grained leather case has brass fittings, a single handle, and press studs in the base for instant slimming. Size 17 in. by 11½ in. £7 10s. Or in polished hide, £9 9s. Post free. (In U.S.A., $23.75 and $27.50, respectively. Carriage and insurance free.).

*20% Customs Duty payable in U.S.A. Immediate Despatch. Obtainable only direct from the makers. Money-back guarantee of satisfaction.*

**UNICORN LEATHER CO. LTD., (Dept. P.M.2) WOODHILL WORKS, BURY, LANCS**

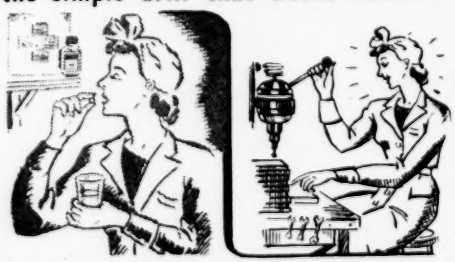
# HEADACHE? PAINS?

Headache, neuralgia, rheumatic pains and the distresses of common ills, all slow down efficiency and send up costs Two Nurolets washed down with water . . . and pains disperse. Nurolets help restore mental and physical alertness You should certainly keep Nurolets handy wherever *women* are on the job. Medical and welfare officers are full of praise for "these marvels of relief."

## Two NUROLETS

and a drink of water

**the simple drill that works wonders**



*Send for free trial samples and literature today. Let your women workers try them.*

Industrial Welfare Dept., **DALMAS LTD.**

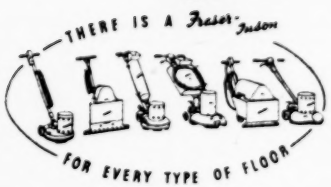
JUNIOR STREET, LEICESTER *Established 1823*

# ECONOMICAL INDUSTRIAL FLOOR MAINTENANCE

*Make a quick, clean sweep in your Factory with the*

*Fraser-Tuson*

**CIMEX SWALLOW**




Manually operated (no motor), the "Swallow" sweeps up dust, swarf, factory litter and broken glass at a walking pace. Width of sweep 24", covers 30,000 square feet in the hour. Easily manœuvred due to the two independent rotary brushes which are adjustable to take up wear. Detachable dust container. Sturdily constructed of heavy gauge sheet steel, fitted rubber tyres, fenders and handle grips. Finished in best quality stove enamel.

*Manufactured by :*

**Cimex-Fraser Tuson Ltd.**

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*Farnborough, Kent Tel. : Farnborough 849*

*London Office : 68 Victoria Street, S.W.1*
*Telephone : Victoria 9334*

*Manchester Office : 211 Oxford Road, Manchester 13*
*Telephone : Ardwick 2003*

---

# SAVE on your soap bill with

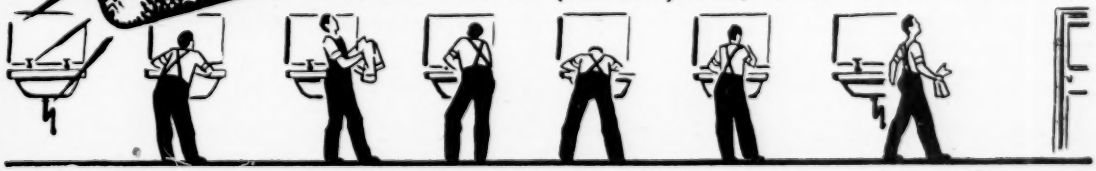
# AUSTIN

## PUMICE HAND SOAP

A pumice type soap which removes dirt, grease, oil and ink instantly—yet does not harm the hands.
An economical soap for the factory worker.
Also supplied in Lysol Hand Soap.
You can order direct from the makers.

*Write now to :*

**ANDREW AUSTIN (RUSHDEN) LTD., 8 Moorfields, London, E.C.2**



# COMPLETE CLEANSING

Greasy, grimy, pore-clogged hands harbour the germs of industrial dermatitis. The finest safeguard against this distressing time-wasting complaint is Duckham's Anti-dermatitis Skin Cleanser — widely used in industry for many years. Its speedy, effective cleansing action, plus its antiseptic nature, leaves the skin clean, soft, supple and germ-free.

**Write to Alexander Duckham & Co. Ltd., 346, Kensington High Street, London, W.14 for descriptive booklet.**

*SPEEDY · EFFECTIVE · GERMICIDAL*

Duckham's
SKIN CLEANSER

# PROTECTIVE CLOTHING

For protective clothing of every description consult Charles Baker. OVERALLS, LONG COATS, APRONS, JACKETS, HEADWEAR.

Should you desire an order made to your own specification, write or call Charles Baker today, you will receive the prompt attention of our service.

*Send for our new, fully illustrated catalogue, sent post free on request to Dept. P.M.10*

Charles Baker
& Co. Ltd.

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LONDON, W.1
Telephone: EUSton 4721/3

# Stage Lighting Equipment

As designers and manufacturers of high quality stage lighting equipment and control gear we shall be pleased to advise you on the most efficient and economical method of solving your lighting problems. Our comprehensive four page folder G2 showing general equipment will be sent on request.

S.E.E.L.

**STAGE ELECTRICAL EQUIPMENT LTD**
**OFFLEY ROAD, THE OVAL, LONDON, S.W.9**
*Telephone: RELiance 3011*

# Production
# CUT ?

It is so easy for a minor injury to cause a major breakdown in the production line. Not only is it essential to render immediate treatment to prevent the wound from turning septic, but to guard against **re-infection** later on ; not only to give First Aid, but to ensure **fast healing.**

ANTIPEOL Cutaneous Vaccine Ointment meets all these requirements. First, the antivirus in it destroys all bacteria, and **immunizes** the area against **re-infection.** Then, special soothing ingredients speed up the natural healing process.

ANTIPEOL Ointment is a fast, effective way of dealing with cuts and abrasions, and it has special advantages in the treatment of BURNS and SCALDS. Painful soreness is relieved immediately, infection prevented and clean healing effected within a short time. Antipeol is microbicide and non-adhesive ; therefore dressings do not have to be changed every day. Full information and clinical samples will be sent on request.

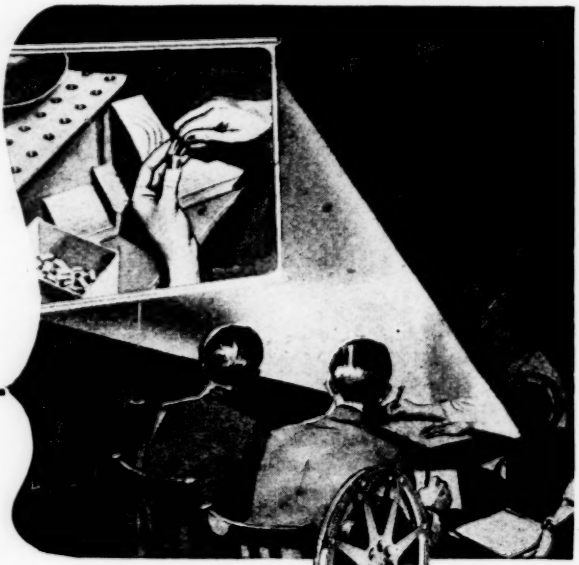
## antipeol

*cutaneous vaccine ointment*

*Produced by the makers of :*
*ENTEROFAGOS for intestinal complaints ;*
*RHINO-ANTIPEOL for naso-pharynx infections ;*
*OPHTHALMO-ANTIPEOL for ocular infections ;*
*DETENSYL for reducing arterial tension.*

MEDICO-BIOLOGICAL LABORATORIES LTD., CARGREEN RD., SOUTH NORWOOD, S.E.25

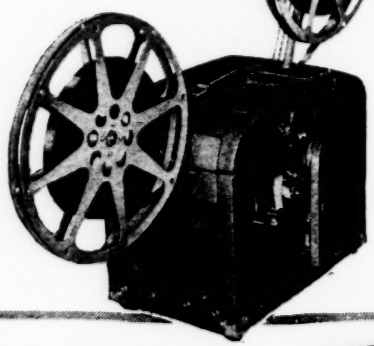
# The G.B.-Bell & Howell projector can solve industrial problems



Industrial management is finding the film an invaluable tool in solving its most difficult problems, and in saving time and money. It is helping to train personnel more quickly and efficiently, speed production and sell with greatly added power.

With films, employees can be taught as a group . . . replacing costly individual training; rapid operations can be recorded in slow motion, wasteful movements eliminated and technical facts presented as powerful sales ammunition.

Every industrial film is an investment in better production and sales and deserves the finest possible projection results. Alone, the G.B.-BELL & HOWELL 16 mm. sound projector meets every one of these essential qualifications for industrial use . . . maximum illumination; natural sound; colour, black-and-white, sound, silent and 'still' projection; easy setting-up, operation and maintenance . . . is why 9 out of 10 Companies choose G.B.-BELL & HOWELL, the precision-built 16 mm. projector by master craftsmen.



BY APPOINTMENT

Manufacturers of Cinema Equipment to H.M. THE KING

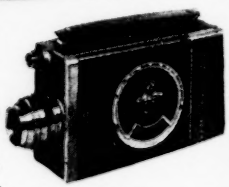
**G.B.-Bell & Howell**

**Built for a Life-time of Service.**

**G.B. EQUIPMENTS LTD.**

*A Company within the J. Arthur Rank Organisation.*

**For the finest 16 mm. MOVIES . . the G.B.-BELL & HOWELL "AUTO-LOAD"**



A good 16 mm. camera is the basis for a technically good film. Easy magazine loading, built-in exposure guide, positive type view-finder, slow motion and four other operating speeds, colour or black-and-white filming are some of the outstanding features of the 'AUTO-LOAD.' It records every bit of action with ease, accuracy and brilliance, and will be available shortly.

***We will be glad to advise you on the application of Films and Equipment to your problems.*** **Post the coupon today.**

**To: G.B. Equipments Ltd., Industrial Service Dept.**
*Mortimer House, 37-41 Mortimer St., London, W.1*

We are interested in the applications of Films and Equipment, and would like your representative to call.

*Company (Name)* .....

*Address* .....

.....

*Executive (Name)* ..... PM/11

Wilson

*Your Story
WELL TOLD

**Does your firm publish a house journal?**

*If the answer is "Yes"—how is your story told, your news collected? And another important question: is your magazine well and attractively presented and produced? If the answer is "No," perhaps the amount of detail and technical work involved, or lack of time and personnel, caused the idea to be shelved or abandoned.*

*For years Perry Press Productions have been specialising in the production of house journals: doing the whole job—writing, illustrating, laying-out, producing and printing—or any part of it—that firms wanted us to undertake.*

*And our method of working ensures complete individuality of each magazine combined with utmost economy. Our many clients include nationally known concerns and they have all come to regard us almost as members of their own organisations.*

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408 Strand, London W.C. 2
*Tel.: TEMple Bar 4242*

PPP

**Members of the British Association of Industrial Editors**



# PERSONNEL MANAGEMENT WELFARE AND INDUSTRIAL EQUIPMENT

INCORPORATING *Civil Defence Journal and A.R.P. & N.F.S. Review*

Vol. 18, No. 139 — DECEMBER, 1951


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Published monthly by Shaw Publishing Co. Ltd., 180 Fleet Street, London, E.C.4 (CHA. 8844) Incorporating "Civil Defence Journal and ARP & NFS Review" and "Welfare," London. Subscription rates: 20s. per year, post free in the U.K.; 25s. per year overseas.

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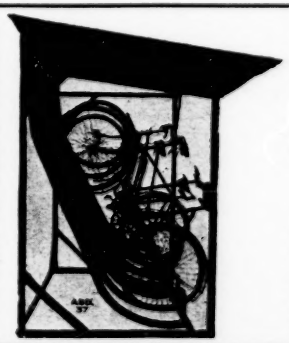

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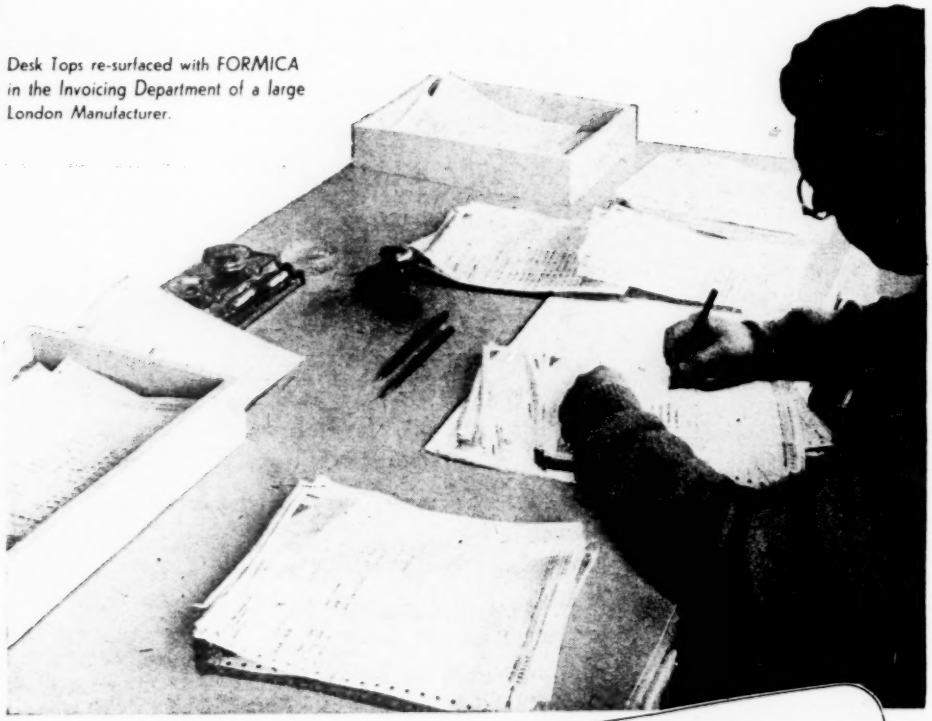

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# *Modern Fire Fighting Equipment—and How to Maintain it*

Using fog (atomising) nozzles, the G.E.C. (Wembley) fire brigade put out this 13 ft. by 5 ft. oil fire in 28 seconds—with water.

By A. G. THOMSON

**Seventy thousand fires do £20,000,000 worth of damage—much of it to industrial premises—in Britain each year. To help the many efficient works fire brigades to fight this menace, managements should provide adequate preventive equipment, and see it is properly maintained.**

STATISTICS show that about 70,000 fires occur in Britain during a normal year, causing damage to property amounting to upwards of £20,000,000. An appreciable proportion of the annual fire losses is caused by outbreaks in warehouses and various types of industrial premises. But for the efficiency and vigilance of works fire brigades, the annual toll of industrial fires would be many times as great.

Despite the new hazards created by electricity, petrol and highly inflammable chemicals, fire control has been facilitated by the construction of more fire-resistant buildings, and by the development of highly efficient equipment and techniques for fire extinction. Not very many years ago the art of fire-fighting consisted solely in the use of hosepipes with a plentiful supply of water behind them. Because of its cheapness and abundance, water is still the most important of all fire-fighting materials, but there are many types of fires for which it is not merely useless, but dangerous.

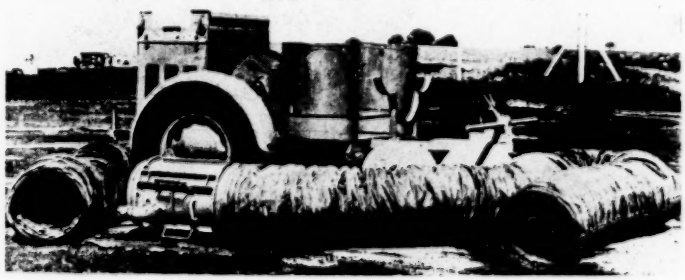
A wide range of equipment is available to control the hazards presented by modern manufacturing processes. Foam extinguishers are an effective means of coping with many types of fires. For electrical hazards there are $CO_2$ extinguishers, which are obtainable as hand extinguishers, as mobile units, or as fixed installations. Where water damage following a fire must be avoided, appliances charged with a liquid having carbon tetrachloride as its base are available. Methyl bromide is another valuable material for fire extinction. There is also the well-known soda acid type of extinguisher.

A high degree of protection is afforded by automatic sprinkler systems, while many potential disasters have been averted by the prompt application of the small hand-operated extinguishers, which might be described as the first line of defence. Fireproof doors, hydrant services, hose reels and fire buckets also play an indispensable part in controlling industrial fires. Even in the best-equipped premises, however, the success of the control measures is governed by the efficiency of the fire-fighting staff. A few seconds may represent the difference between a burning fabric, which can rapidly be extinguished by a portable appliance, and a major conflagration.

It is not enough that fire equipment of suitable type should be provided. Adequate protection is only achieved if all appliances are maintained in first-class condition and can immediately be brought into action when required. Portable ex-extinguishers are valueless unless there is someone on the spot who can use them efficiently should the need arise. One of the first requirements, therefore, is the training of suitable members of the staff to use first-aid equipment.

Since delay is liable to be caused in an emergency by failure to remember the right telephone number and difficulty in locating it, a wise precaution is to have the number of the local fire brigade prominently displayed where the telephone operator can see it. An efficient fire alarm system is also advisable.

Of basic importance to fire control



Prototype smoke extractor built by Woods of Colchester Ltd., for the Ministry of Works. Two men can carry fan and ducting from the trailer, on which is mounted a generator connected by cable to the fan.

is a regular and thorough system of inspection and maintenance. In factories where no trained fire fighting staff is available, one responsible man should be detailed to inspect all appliances daily, or at least weekly. It should be his duty to see that extinguishers are accessible and in good condition, water buckets filled, etc. All equipment should be conscientiously checked over during inspections, the conditions noted being recorded on suitable forms, which should be filled out as the inspection progresses instead of being completed from memory later on. It is also important that any defective conditions should immediately be brought to the attention of someone with the necessary authority to see that they are remedied without delay. If desired, arrangements can be made for periodic inspections and tests to be carried out by a reputable firm of fire equipment manufacturers.

In factories which have their own fire brigades, the fire service is responsible for inspections, which should be made daily or weekly as circumstances permit. The following are some of the principal points which require attention.

## *Care of Extinguishers*

Any extinguishers suspected of having been partly emptied by use at a fire, or of having been knocked down and replaced, should be carefully examined. Extinguishers kept outside the building require special attention during frosty weather. They should either be kept in cases or—preferably—wrapped. A carbon tetrachloride extinguisher of the unsealed type should be inspected at least monthly and topped up with carbon tetrachloride. Foam extinguishers should have their contents inspected and stirred at least every six months. The contents of soda acid type extinguishers should be stirred monthly. Methyl bromide and $CO_2$ extinguishers should have their weights checked once a month.

Pumps require daily, weekly or monthly inspections carried out according to the makers' charts. When a unit has returned from a fire it should immediately be made ready for the next call. If it has been used from open water it should be connected to a hydrant and thoroughly washed to get rid of mud and grit from the pump primer casing, primer, etc. Any defects noted during pumping should promptly be reported. The engine

**While the pipes are being welded, these works firemen stand by to protect the wood block floor.**

lubricating oil should be checked and also the oil levels in the wells or sumps of the reciprocating primers. The petrol tank should be filled.

All traces of soil, grit and dirt should be removed from the working parts of stirrup hand pumps, and the strainer requires to be maintained in a clean condition. A little grease should be put on the pump rod, but the pump should not be opened up so long as the plunger is working freely. The nozzle should be clean and the hose connection tight and sound. The cranks and joints of two-man manual pumps should be oiled. If suctions are kept coupled, the couplings should be "spanner" tight, the screw threads being examined for damage or burring.

Hydrants and washers require examination every six months. In frosty weather it is important to make sure that the hydrant is free of water. The outlet nipples should always be tight and have undamaged threads.

Fire hose should be examined for signs of dampness, mildew or rot, and should always be thoroughly dried before being stored or fitted to appliances. Except during an emergency, canvas hose should not be dragged along ground or over rough-edged walls, since this treatment causes injury to the fibres. The rubber washers on the female couplings should be inspected and all couplings tested. Couplings should never be dropped, since a sharp knock can damage a coupling even when mated.

Where a special type of protection is provided, such as an automatic foam or $CO_2$ system, periodic inspections are carried out by the makers. Nevertheless the installation should be regularly inspected and tested weekly to ensure that it is in good working order and unobstructed, and that sufficient water is always available. A spare sprinkler head should always be on hand to replace any head which may by chance have been knocked off.

## *Ladder Inspection*

Ladders require careful inspection every month, each rung being individually examined. In order that cracks or any other defects may be readily observed they should be kept free from paint, clear varnish being used instead. All fire doors and shutters and their hardware, including fusible links, should be maintained in good condition.

In modern fire control practice the emphasis is on prevention rather than extinction, the major task of the fire brigade being, therefore, to ensure that fire hazards are minimised by constant supervision and insistence on good housekeeping throughout the factory. Since many fires are of electrical origin, defective equipment, such as loose or temporary connections, missing pilot lights, etc., should be reported. Naked lights near spraying guns should be prohibited, as should the indiscriminate use of inflammable materials such as naphtha. Oily rags should be properly disposed of instead of being pushed under benches. It is also important to ensure that fire appliances are not obstructed by stock, that fire doors are never blocked, and that gangways and exits are kept clear.

Firms having no works fire brigade can obtain the benefits of expert advice on fire hazards or problems by joining one of the various associations which exist. The annual subscription is small, but the savings effected by the timely elimination of potential hazards may be very great.

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Employees of the Triplex Safety Glass Co. Ltd., are sharing £15,000 from their firm's profits. They have given back half to help establish a pension fund.

# These Training Courses Discover Our Future Executives

**With its works school to bring new trainees up to technical college standard, this engineering firm provides training for its employees which not only shows up tomorrow's leaders but also maintains the labour supply for the rank-and-file jobs in the office and the factory.**

**By J. W. GARTON,** *Chairman and Managing Director, The Hoffman Manufacturing Co. Ltd.*

MANY young men who are now rising to positions of responsibility in the Hoffman Manufacturing Co. Ltd., received their initial training in the works school, and have gained their qualification through the company's scheme.

Trainees are split into two main divisions:

(a) The craft shop apprentices.
(b) The staff trainees.

The former are drawn mainly from the local secondary modern schools and county technical school, while the latter are expected to be up to school certificate standard and are drawn mainly from the grammar school.

The training officer works in close liaison with the youth employment bureau and local schools. Visits by groups of school-leavers are encouraged so that the young persons can see conditions of employment and choose the work which appeals to them. Those who apply for work are given a simple test in the works school and interviewed and advised by the training officer. By this means the standard is maintained for the craft shops and offices. Those who do not pass the test are seldom turned away, as suitable work can be offered in the production shops.

Lads accepted in the craft shops (tool room, machine shop, electrical department and pattern shop) start by serving a short time in the stores. One day a week they are released from work to attend the works school, where instruction is given in mathematics, science, English and engineering drawing. The function of this school is to bring the school-leaver up to the standard required for entry into the technical college (some students are sufficiently advanced to go straight into the college without a period in the works school).

The lads receive their practical training in their respective shops and their initial technical training in the works school.

They are encouraged to take either the national certificate in mechanical engineering or the City and Guilds machine shop engineering diploma, and the management offer a prize of books to the value of £2 to any lad who obtains the national certificate before reaching the age of 21. Another prize to the value of £5 is given if the higher national certificate is obtained before the age of 21. As a further incentive, the company pay 50 per cent of the cost of all textbooks required by the lad in his studies.

**Practical training is given in the shops, initial technical training in the works school.**

In addition to these prizes, the management also provide prizes annually to the first three students of each of the three classes in the works school. The presentation of prizes takes place each December, when all the junior apprentices, together with those senior apprentices who have merited the awards referred to, assemble in the school with their respective heads of departments. The works manager makes a short introductory speech to the boys and then the managing director presents the prizes. This yearly function serves a very useful purpose, in that it enables the managing director and the works manager to see the new group of apprentices, and it also acts as a great encouragement to the lads.

About four years ago, the need was felt for a supply of trained men to become machine setters on the various large automatic lathes and grinding machines, and it was decided to start a scheme of training with this end in view. A group of boys

**One-day-a-week course for girls up to 18 years maintains the supply of shorthand typists and comptometer operators.**

were selected straight from school, and a six year course of training was prepared which will take them right through the production shops.

The initial period of six months in various stores is designed to teach them something of tool control methods, and after that they receive a further six months training in tool tipping, grinding and servicing. The next year is devoted to centre-lathe turning and general machine maintenance work. Thereafter they spend equal time in the turning and grinding shops learning from skilled setters the art of setting-up automatic machines. Concurrently with the practical training, they are released one day a week to study for the City and Guilds machine shop engineering diploma. Although these lads are not yet out of their time, it is felt that a group of very useful men will be available in a few years' time.

Six years ago a suggestion was adopted which provides a camping holiday for all junior apprentices. They are given an additional week's holiday with pay, and in charge of the two school masters, spend a week under canvas. This has proved a very popular and beneficial arrangement, camps having been arranged at Weymouth, Isle of Wight, Ilfracombe and Lowestoft in succeeding years.

No written indentures are made, but at the end of his apprenticeship each young man receives an attractively designed apprenticeship certificate giving an outline of the experience gained, and signed by the works manager.

In 1947 a scheme of training was introduced for the staff juniors. It was decided to take about twelve lads of school certificate standard and give them a thorough training in the various main offices. A time table was drawn up to give each lad a period in cost office, accounts, purchase, planning, works checking and methods. After each move the training officer receives a report from the departmental head on the boy's behaviour and progress.

### *Private Study*

The trainees are released one day a week to attend the commerce department of the technical college, or to read in a course of private study with a reputable tutorial college, and are encouraged to take the national certificate in commerce, or the intermediate and final examinations of one of the professional bodies.

Suitable monetary awards are offered to those gaining success in the intermediate and final examinations of the selected professional body. The scheme has not been running long enough fairly to assess its value, but again it is hoped that in a few years a nucleus of young men with an intimate knowledge of the firm's office methods, and suitably qualified, will be ready to fill some of the more important positions.

In addition to this scheme, which is only for boys, all staff girls are allowed one day a week up to the age of 18 for training at the technical college, where special courses are arranged in shorthand, typing, calculating machine work, arithmetic and English. This has proved a popular thing with the girls and good examination results have been obtained. As a result of this branch of training the offices are kept supplied with shorthand-typists and comptometer operators.

A committee consisting of the heads of craft shops, presided over by the works manager, exists to co-ordinate policy and to discuss all matters of apprenticeship training. A similar committee of staff executives co-ordinate training policy for staff juniors. The training officer is the secretary of both these committees. He is responsible for recommending suitably qualified young men for promotion; in this connection the national certificate in engineering is the minimum qualification for promotion on the technical side.

## They Trained Themselves

THIRTEEN junior executives of Brown-Forman Distillers Corporation, at the invitation of their president, took responsibility for organising a training programme to prepare themselves for better management positions and to train other company personnel for better jobs.

After the group was formed, the president issued one instruction: "Give every man in the company an opportunity to better himself." As a result they drew up a four-point programme: (1) a training programme for selected new employees (2) luncheon meetings at which trainees could be given an overall picture of company operations (3) maintenance of files with pertinent data on all employees, to be reviewed when making recommendations for promotion (4) tuition refund plan, by which the company could help employees to complete their education.

Four months after their initial meeting, one of the junior executives was promoted to executive assistant to the president. Their first protegé, a dining-room employee, was trained and placed on the sales staff.

(Condensed from *Sales Management*, 1/4/51.)

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Ready-compiled film programmes, suitable for shows in factories during meal-time breaks are now available through the G B. Film Division. Each comprises selected shorts providing over 30 minutes' entertainment.

# Accident Investigation Can Step Up Production

By ROBERT McKOWN, *formerly Editor, British Journal of Industrial Safety and Industrial Accident Prevention Bulletin.*

**To an alert management, an accident is a symptom of inefficiency. In enquiring into it, they will look for more than the immediate cause; for, by digging deep, they will probably put their finger on some basic production fault. Then it only remains to apply the remedy.**

IT is safe to say that, as a general rule, accidents are not investigated unless they injure someone. If a man falls down a flight of steps, picks himself up unhurt, and carries on with his work, it is almost certain that the cause of the fall will not be investigated. Only if he is injured is there likely to be any enquiry—and even this may depend on whether the injury is serious enough to be reportable under the Factories Acts or is liable to be the subject of legal proceedings.

For obvious reasons, this state of affairs is more or less inevitable. But it has the unfortunate result of causing the investigation of *accidents* to be regarded as identical with the investigation of *injuries*. At the back of the investigator's mind is the idea that he must find out how the man was injured and then, if possible, suggest a means of preventing others from being injured in the same way. That, and no more, is the limit of his endeavour and—essential as it is—it may leave much other useful work undone. In particular, it may cause the investigator to overlook factors which are only remotely connected with the injury but which may be closely related to other important matters, including production.

To take a typical accident, suppose that a girl is injured while using a power-press. Investigation may show that the press had been equipped with an adequate fixed guard but that the girl had removed it because it got in her way. These facts alone would be sufficient to explain how the girl was injured; having elicited them, many investigators would be ready to go on to the next stage—the taking of steps to prevent a similar accident. These steps might consist of the simple but ineffective course of warning press operators not to remove guards or the more positive action of fixing the guards in such a way that they were not easily removable.

## *Find the Remedy*

But the thorough investigator, intent on more than the cause of the injury, would want to go further. To him, the fact that the girl had found the guard a hindrance would itself call for enquiry. If the girl could not work quickly enough with the guard in position there must have been something wrong with the guard or something wrong with the way the girl was working. Either of these faults would affect production as well as safety; whether the remedy consisted of better training of operators, the use of a different guard, or the introduction of automatic feeding, the removal of the fault should result in greater output as well as fewer accidents. To put it another way, the investigation would have revealed a lapse of production efficiency as well as a hazard. And the remedy applied—improved operation of the press—would have satisfied both the production manager and the safety officer, two people whose aims are erroneously supposed to be widely divergent.

Numerous other examples could be given. The dropping of a heavy casting on to a man's foot may lead to the realisation that much avoidable man-handling is being done. The thorough investigation of a milling machine accident may reveal the fact that one corner of the machine shop is inadequately illuminated. The fact that a man falls from a ladder while oiling a bearing may cause the whole question of lubrication and other maintenance to be reviewed, and improvements made by the introduction of permanent means of access, remote lubrication, and so no.

It may be argued that, in an efficient works, it should not need an accident to draw attention to such matters as these. But it is equally true to say that, in an efficient works, it should not need an accident to draw attention to an unsafe machine or an unsafe method of working. In actual fact, no works is 100 per cent efficient; what differentiates between a good factory and a bad one is the frequency or infrequency with which things go wrong and the thoroughness and

(*Continued on page 259.*)

### ACCIDENT "POST MORTEM"

1. **Did the victim do something unsafe? If so, why?**
2. **Was there a physical hazard? Why had it not been removed?**
3. **Were environmental conditions (lighting, heating, ventilation, etc.) as good as they could have been?**
4. **Was the job being done in the most efficient way?**

# Teamwork Improves Output

RAISING output by bringing together those departments directly concerned with production is proving successful at Joseph Lucas Ltd.

Management teams have been formed whose function is to co-ordinate their activities in an agreed programme for improving production, i.e., by reducing faulty work, reducing capital investment for a given volume of output, reducing all other overheads, improving manufacturing techniques, increasing worker effort, increasing plant and floor utilisation, and nationalising existing design for cheaper production.

Each team comprises the production manager (the leader), designer, methods engineer, quality superintendent, and product engineer. The first four all have departmental functions, but the product engineer has a full-time job as planner and co-ordinator of the team.

When this team has succeeded in bringing production and quality up to the highest possible level, continued improvement must slow down, and the question of cost of materials, rather than labour, becomes more important. Then the second team comes into action—the design-for-production team, which works closely with the management team and consists partly of the same people. Here the design engineer is the leader; with him are the design draughtsman, methods engineer and product engineer. Their task is to ensure that each new design is the simplest and most economical that can be devised. Thus, improved production engineering techniques and design simplification are being used jointly to improve output.

(Condensed from *F.B.I. Review*, 10/51.)

## Ideas Reporter

WHY not give somebody in your works the definite job of searching out the good ideas developed by one department or individual and passing them on to others—with suggestions as to how they can be adapted if necessary?

Methods commonly used in a plant for exchanging ideas—meetings, inter-departmental memos., bulletins—often fail because they lack the good reporter's "nose for news" which tracks down the new idea or the timely twist on an old idea. Find a man who is genuinely interested in everything in the plant, capable of winning people's confidence, and able to solicit and collate the necessary facts, then make "ideas reporting" one of his regular duties.

(Condensed from *Factory Management and Maintenance*, 8/51.)

## A Plan For Everyman

SEEKING to develop a more effective way of selecting and developing men for supervisory and higher management jobs, Western Area, Bell Telephone Co., Canada, introduced ten years ago the "Plan for Everyman" by which the working career of every employee could be planned and directed from youth to retirement.

Once a year each supervisor prepares a report on three aspects of every employee who works under him: (1) State of health, performance and personal relationships with others; (2) apparent potential or "target" as far as can be considered; (3) need for training, medical aid, change of work or domicile. This report is usually prepared in consultation with the individual employee, and discussed with the supervisor's immediate superior. The head of the unit then calls a meeting of the supervisors concerned and representatives of central personnel groups. Each report is discussed until the group reach a unanimous recommendation.

Simple summaries are prepared covering the people reviewed, and used for manpower planning. On this basis every employee knows where he stands and can contribute to his own development. Every supervisor is informed about members of his group and has to fulfil recommendations concerning them. Every unit head is informed of the manpower situation and can plan his work programme accordingly. Every personnel manager is kept posted of the manpower position and top management are kept informed of the overall situation and can adjust policy and programmes to meet changing demands.

(Condensed from *Personnel Management*, Sept./Oct.)

## Record Breakers

AT the Shell Oil Company's Houston Refinery, a 15 ton stack was replaced in the record time of 3¼ hrs. by a crew of ten men. Every move necessary to lowering the old stack and raising the new was worked out in detail beforehand. The success of the job was attributed to this planning and the exact understanding of what each member of the crew had to do. The men took part fully in all discussions. Although there was a foreman on the job, there was no supervisor in charge of the lifting of the stack, and the men themselves chose the rigger to lead them. This was the first time the crew had carried out such a big job, and they did it in less time than was taken by the usual contractors.

(Condensed from *Supervision*, 9/51.)

## Study Work Delays

STUDY of non-productive time and its causes is probably the most effective way of increasing production per man-hour. Research among garment workers in the U.S.A. showed that delays were due to two causes; unavoidable delays such as machinery breakdowns; avoidable ones such as chatting by operatives.

By distinguishing between productive and non-productive time an analysis was made of the relationship between nature, frequency and duration of delays, and the work method and

**Mr. Sydney S. Guy, chairman and managing director of Guy Motors Ltd., throwing the first dart after opening his firm's new sports and social clubhouse. Mr. Guy also pulled (and sampled) the first glass of beer and broke a snooker pyramid on one of the two billiards tables. Outdoor sports have been provided for some time: the new clubhouse caters for employees who prefer less strenuous pastimes.**

pace. To do this it was necessary to find a common denominator. In this case, it was the ratio of the production standard to the average time required to complete a production unit. This index was then computed for a group of representative operations.

Results showed that the percentage and duration of delays recorded for a worker were closely related to his productivity. This means that a substantial increase in output could be achieved by improving the work method of the individual. The data also showed, however, that some delays may be required by the worker to produce an individual optimum rate, and that workers may produce more in the long run by using certain extraneous movements, than if they try to adhere to a set work routine.

(Condensed from *The Management Review*, 9/51.)

## *Salvage Drive*

SHORTAGE of essential materials is being overcome by Hoover Ltd., by campaigns to reclaim waste. A "Materials Recovery Week" held at the Perivale factory recently produced over 20 tons of scrap. Company vans called at workers' homes to collect metal, rubber and paper for salvage. Many employees brought their own domestic salvage to the factory.

Samples of waste material from each factory are sent to a central committee which works out ways in which scrap from one factory can be re-used by another. Factory committees meet each morning to examine rejected components, to prevent recurrence of faults, and decide ways of salvaging used materials. The work of these committees is co-ordinated at high level. A directors' materials committee meets weekly, and management committees meet daily in most factories. In many cases the substitution of new material has improved the production process and lowered costs.

In two months internal publicity produced 197 suggestions for materials conservation from one factory alone.

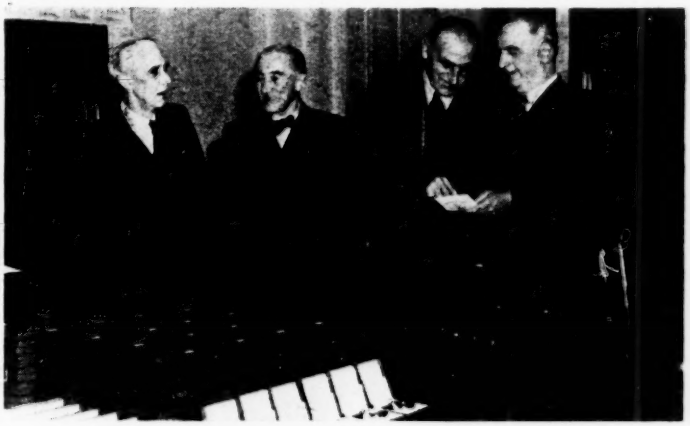
(Condensed from *Target*, 8/51.)

## *Spot Those Tools*

THE Trane Co., La Crosse, Wis., found that delays often occurred on maintenance jobs, because the necessary tools had been borrowed from stock and not returned. Valuable time was lost tracing the tools, and establishing the right of ownership. This problem has been solved by painting all tools and equipment used by the maintenance staff a bright yellow. These can quickly be spotted if they stray to other departments, and they can easily be collected when a job is finished.

(Condensed from *Factory Management and Maintenance*, 10/51.)

## THEIR LONG SERVICE REWARDED



**These four stalwarts represent 209 years' service with the North Thames Gas Board. With nearly 600 other employees, having an aggregate of 25,575 years in the industry, they attended a ceremony at which they were presented with gold watches or chiming clocks by the chairman, Mr. Michael Milne-Watson.**

## *Ideas From House Magazines*

### Festival Dinner

A total of 10,853 years' service with George Kent Ltd., was represented by the 321 members who have served the firm for 25 years or more. 42 of them have retired. At the firm's Festival dinner, Commander Kent, chairman, and Mr. W. G. Ardley, joint managing director (who has 58 years' service to his credit), were each presented with a volume bound in blue Morocco leather and containing an illuminated address and signatures of the 321 long-service members. These volumes had been subscribed for by long-service employees. **(George Kent News.)**

### Training Bonus

Cash bonuses amounting to nearly £260 were awarded to fifty-four apprentices and twenty-six girls for examination achievement under the David Brown company's training scheme. **(News Letter.)**

### How to Treat a Cold

Dr. P. H. Nash, of Slough Industrial Health Service, gives these tips on treatment for the common cold.

To prevent colds, avoid source of infection and build up body resistance. If you catch cold, go to bed as soon as possible after work—extra rest helps. Have a hot bath, a hot drink with two aspirins, and put extra blankets and a hot water bottle in your bed. Stay in bed if you have a fever. Keep warm and dry. Drink plenty of water and eat simple foods which agree with you. A laxative is helpful, as constipation often accompanies colds. The use of an inhalant containing benzedrine will give relief, or in the "hay fever" type one of the anti-histamine preparations will help. The nose can be cleared by sniffing up a solution of equal parts of common salt, sodium bicarbonate and borax. If a cold starts with shivering and a high temperature, see a doctor. **(Mars Magazine.)**

### Suggestion Can Win £250

Revision of their suggestions scheme means that an employee of Vauxhall Motors can now earn up to £250 for a suggestion; highest award to date was £185. It was agreed that where a suggestion could be accurately assessed, an award of 10 per cent of the first years' saving should be made a minimum award, and where an exceptionally ingenious and original suggestion was made an additional 10 per cent be paid. **(Vauxhall Mirror.)**

### Employees' Market

The Thorncliffe Mart was opened last month for the disposal and purchase of surplus domestic articles, clothes, toys, etc., by employees of Newton Chambers. Employees may visit the Mart only during the dinner break or after work, but it is also open during the afternoon to the wives or husbands of employees. **(Thorncliffe News.)**

# Visual Aids Help 2,000 New Employees a Year

By FRANK G. CASEY

**Through the two training schools of Joseph Lucas Ltd., pass some 2,000 female employees a year. To help recruits to learn their jobs and to impress on them factory safety rules, various visual aids are used. One of them is the combined visual and audible instruction unit described in this feature.**

"ONE picture is worth a thousand words"—so runs the maxim; and practical proof of the truth and wisdom of the saying lies in the increasing use of "visual aids" for a variety of purposes in modern industry. Visual aids range from the simple poster or wall chart that uses some form of illustration or diagram, to the elaborate sound film in full colour. Between these two extremes lies a variety of equipment and material all designed to say it with pictures.

Among the equipment that is proving of value to industry for instruction and training is the *Synchrophone*. Basically it consists of a glass-fronted screen covered with black and white or coloured images which are illuminated in a predetermined sequence, synchronised with a commentary recorded on gramophone discs. The pictures on the screen remain invisible until pinpointed at the correct moment by bulbs placed behind them. If necessary, some pictures, titles, etc., may be left permanently on view to avoid leaving the screen blank when the apparatus is not in use.

The sound unit for playing the records is like a radiogram in appearance; unobtrusive signals during the commentary actuate the mechanism which illuminates the pictures. Although each subject to be covered requires a picture frame, any number of them are served by one sound and synchronising unit. Facilities are available for producing the frames and records on any subject and a variety of treatments can be adopted. The manufacturers can supply standard frames on a number of subjects, such as road safety and the care and use of tools. The average time taken for a complete visual lecture is ten minutes.

Most useful field for this equipment in industry is probably in the welfare and training department for instilling the elementary principles of hygiene and factory safety into new employees, or for helping workers to do their jobs more efficiently.

One firm which has proved the value of the equipment for this type of work is Joseph Lucas Ltd., of Birmingham. Through their two training schools pass some 2,000 new employees a year. All of them are women and girls (the male employees have a different system of apprenticeship training), and most of them have to be taught their jobs from scratch.

## *Training in Safety*

The firm started using the equipment during the war when they received a sudden influx of workers directed from other, less essential, occupations, who were without factory experience. Fearing a sharp rise in their accident rate, the firm decided to initiate a special recruit safety-training scheme; they picked the *Synchrophone* as being the best and quickest method of impressing on these inexperienced employees the rules of factory safety. So successful did the method prove that since then all new employees reporting to the training schools have seen the visual safety lecture as part of their basic training.

The trainees are grouped in classes of up to twenty and they see the lecture in a room fitted up for the purpose. At the end of the lecture there is a discussion during which the instructress answers questions and clears up any points which have not been understood.

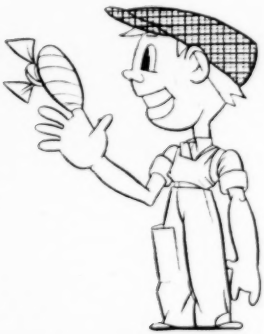
The Synchrophone unit with the glass-fronted screen above it.

To drive home fully the points made, the screening is always linked with a visit to the works surgery.

Humour is used to put over the safety message; caricatured workers are seen on the screen performing operations first in the wrong and then in the right way. The management find that the judicious use of this cartoon technique increases the effectiveness of the safety propaganda. Flexibility is another attribute of this type of instruction. For instance another frame, "Care of Milling Cutters," is used in the training schools. When this was first introduced the war effort was at its height. It was therefore pertinent to include a picture showing that careless damage to machine tools was so much gold poured into Hitler's pocket. To show this today would, of course, be ridiculous, so the picture has been removed without detriment to the whole.

The *Synchrophone* is not, of course, the only method of safety training used by Joseph Lucas.

Posters, etc., play their part and once a year a safety week is held, during which an intensive campaign of film shows, lectures and demonstrations keeps the workers safety-conscious. Although it is extremely difficult to give facts and figures of tangible results achieved in lowering the accident rate as a result of using the *Synchrophone*, there is no doubt it has had a lasting effect. The company say that they are well satisfied with the results achieved with this method of instruction, and this may be gauged from the fact that two copies of a specially commissioned unit, "Methods of Working," have just been delivered to their schools. Although the initial cost of these units is high. The company are convinced that they do the job of instruction in a way impossible with any other method.



**One of the images, all of which can remain invisible until illuminated. Says the commentary accompanying this picture: "Report every accident, however trivial. Remember—a pin-prick is often more dangerous than an open cut."**

## How to Secure Small Parts

SMALL parts like screws, rivets, pins, and washers, have a habit of slipping through the fingers or rolling off the bench. The answer to this difficulty is a roll of sticky tape. Press the end of the roll of tape to the bench and cut off the required length. Turn the strip over so that the adhesive side is uppermost. Small parts can then be shaken on to it and pressed lightly to secure. The loaded strip can be attached by the free end to any working surface.

(Condensed from *Mass Production*, 10/51.)

# Nation-Wide Recruiting Campaign

**The King's Speech announced that the Government "will take the necessary measures . . . to develop Civil Defence." First step is an intensified publicity campaign designed to recruit at least 4 per cent of those eligible.**

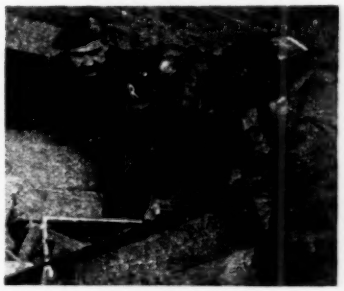
AS local authorities throughout the country are getting into their stride in the Civil Defence recruiting campaign, the Home Office has released a film, "The Waking Point," which stresses the need for trained civilians ready to play their part in defence of the country.

Speaking at the première of the film on November 2, the Home Secretary, Sir David Maxwell-Fyfe, said recruiting was among the most pressing and urgent of Civil Defence tasks. At present there were 10,000 men and women in the Auxiliary Fire Service, 17,000 in the National Hospital Service Reserve, and 155,000 in the Civil Defence Corps. This last figure was about one-third of the smallest number required in peace-time if we were to expand quickly in an emergency.

"I wonder whether all of us realise the importance of being prepared before we are needed," said Sir David. "I know that those who now say they have not got time for Civil Defence would, in an emergency, come forward in their thousands and offer their services. *But do they realise the appalling difficulties of training them all in a hurry if an emergency arose?*"

The film deals with the dangers of this "I'll be there on the day" attitude. It forms part of a nationwide publicity campaign designed to combat the two main objections to recruitment—lack of spare time, and "having had enough in the last war." Posters and press advertisements incorporating the slogan "You can't be certain, you can be ready" are now appearing in both local authority and Home Office publicity, and will continue through the winter.





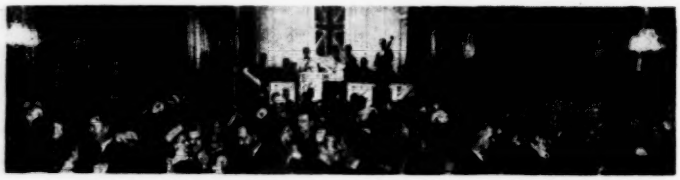
**Scene from the new film. Modern oxy-acetylene lamp cuts a steel girder and frees a casualty.**

In a recent survey by the Home Office, 4 per cent of those questioned said they intended to join Civil Defence in peace-time; 17 per cent said they could find time for Civil Defence. But only 2 per cent said they both intended to join and could find time to do so. Thus, say the Home Office, if 2 per cent of those eligible could be brought to the point of actually joining, a big step towards the achievement of peace-time establishments would be made, and if 4 per cent would join, then the peace-time recruiting problem would be largely solved. The survey also revealed that a general appeal for Civil Defence recruits is unlikely to succeed. The new campaign, therefore, contains appeals to particular types of people to join individual services.

### *Who is eligible?*

Who is eligible for Civil Defence service? Not Class Z or equivalent reservists. Some men under forty may be eligible for the rescue and pioneer sections, but generally the lower age limit for men is forty years. For women it is thirty, except in the ambulance section (eighteen).

The Home Secretary has emphasised the fact that new weapons, far from making Civil Defence useless, have increased the need for it. "Whatever the weapons which might be brought against us," he said, "Civil Defence can do a great deal not only to give life but to give succour to those who suffer physical and material injury. Let us not forget that there are forms of protection against each of the effects of atomic explosions — radioactivity, heat flash and blast."



# Organising Your Works Party

By **W. O. NUNN**, *Director, Industrial Recreational Services Ltd.*

**Around this time managements and social clubs usually decide that some form of function should be arranged to celebrate Christmas. Here the expert gives some advice on how to make a success of the job.**

IN my experience the annual dance is the most popular type of entertainment. Normally you will find that you have in your midst a consistent number of keen dancers who will support such a function; but if you want a representative turn-out from your works you must attract also the non-dancers and those who make only one annual pilgrimage to a dance.

Organise, first, a small but effective committee (including a non-dancer) to run the event. Each member must have well-defined responsibilities. One, for instance, with a leaning towards publicity and promotion, should see that adequate posters are displayed and announcements made well ahead. Another should be responsible for building up the evening's programme and ensuring, by close liaison with the M.C., that it is carried out. He should also arrange novelties, carnival hats and spot prizes, and generally act as floor manager. It is most important to have a reception committee in the entrance hall to welcome the guests and to see that any new or shy members of the firm are introduced to at least three or four people.

A good band can make the evening—a bad one will not only ruin it but will discourage people from attending future functions. Fortunately, in and around most cities, there are a number of good professional and semi-professional bands to choose from and it is wise for you to hear them before finally making a booking. Minimum rates for musicians are laid down by their Union so don't attempt to cut them.

You must have an experienced M.C. to keep the party going according to the programme.

Non-dancers can usually be attracted by a whist drive. Failing this, a cabaret or novelties, such as a raffle or lucky ticket prizes, will help. If you cannot afford experienced artistes for your cabaret, however, drop that idea. Don't have too long an interval for the band. Fifteen minutes should be enough if refreshments are waiting when the musicians come off the stand. If you can, fill in the interval with gramophone records or a raffle.

When the dance is preceded by dinner, be sure to have a proper seating plan—even if it means putting a blank plan on the notice board some weeks ahead and inviting your people to indicate where they would like to sit. While speeches are a necessary evil, they can be controlled if your speakers are given a time limit (20 minutes should suffice for the lot) and the chairman exerts his authority.

Canteen parties can be very successful if you are blessed with good premises. Time is well spent in decorating the room to create the right atmosphere and facilities available will, of course, dictate whether you have a buffet or a set meal. If, normally, you do your own catering, why not call in an outside caterer and so give your own kitchen staff an opportunity to relax and enjoy themselves?

Theatre parties are a popular choice where you have a group of, say, between twenty and a hundred people. It is essential, however, to book your seats many weeks in advance.

Finally, there are the children—probably the toughest proposition of all from the organising angle but, the most satisfying if the job is well done. Decide first on age groups, limiting the minimum age to 4 and the maximum to 12. Don't invite the parents, whose only function should be to deliver and collect their offspring. Ensure that the children have adequate means of identification on them in case of emergencies.

It is best to get the boisterous games over before tea—disastrous consequences can otherwise result. If you are short of ideas for suitable games, I recommend—among other good books on the subject—*Indoor and Community Games* by Sid G. Hedges. You will need plenty of helpers—preferably one to every four children. Don't let the party go on too long; three hours is quite enough. An ideal programme is based on one hour of games, a Christmas tree and presents, followed by tea and, after that, a cartoon film show, Punch and Judy or a good magician specialising in children's shows.

**A children's party is probably the toughest—but most satisfying—proposition.**

## Christmas Greetings

**The Editor and Staff wish all readers a very Merry Christmas and a Happy and Prosperous New Year.**

**Good or bad home conditions are usually reflected in a man's work. Recognising this, the management of Fort Dunlop readily offered advice and assistance, including the services of their architect and legal adviser, when some of their workmen decided to build their own houses. The results to date are showing that this faith was justified. There may well be an idea here for other managements.**

# Dunlop Employees Build their Own Houses

**By WINIFRED GODE**

FIFTY houses in 2½ years, built in their spare time, is the target of the Fortitude Housing Association, composed of employees at Fort Dunlop. Proof of their ability to carry this out is shown by the progress to date. The foundations were dug in June, building started in July, and by the end of October two houses were ready for occupation and ten others well advanced.

The story behind this accomplishment is one of enterprise and perseverance. It all started when Mrs. Lucy Hill, a "puller-downer" in the Lastex yarn factory at Fort Dunlop, suggested to her son that he should build his own house. Mr. A. Hill, employed in the covering-room of the same factory, thought this was a good idea and canvassed some of his workmates to see if they would help to put the scheme into effect. As a result of the interest aroused, an approach was made to Mr. A. R. Bloxham, works manager of the Lastex yarn factory, who arranged for an informal meeting to be held at which it was decided to form a housing association.

Fifty men agreed to join, and each paid a membership fee of 4s. a week. The next step was to engage an instructor to teach the men how to build homes. Although some of the men were tradesmen (e.g., carpenters, engineers), there were no experienced builders among them. The company granted the use of a site at Fort Dunlop, and the men paid for the services of the instructor, and for materials to practise with, out of their subscriptions. At the end of nine months they were sufficiently proficient to start building.

Meantime, the Fortitude Housing Association had been legally constituted under section 188 of the Housing Act, 1936, and registered under the Industrial and Provident Societies Act, 1893. Fifty members each paid in £20, giving an initial capital of £1,000. A site for thirty houses was purchased and the necessary licences obtained from the Solihull Urban District Council, whose officers have given the project every encouragement. These houses do not come off the local authority's normal quota, but are additional to it.

## *Wives' Ideas Used*

The houses were designed by Dunlop's own architect, Mr. S. G. Bentley, and approved by members of the association and their wives, many of whose ideas have been incorporated in the final plans.

The houses are semi-detached with gable ends, and tiled roofs of various colours, which, combined with the brickwork, give a different colour scheme for each pair, making the estate as a whole pleasing to the eye. Each house has seven rooms: three bedrooms, living room, lounge, kitchen and bathroom. There are two large bedrooms, one with a built-in wardrobe and airing cupboard. The bathroom is half tiled, with built-in bath, pedestal wash basin, heated towel rail, and a toilet. There is a spacious landing and wide, shallow staircase.

Downstairs, are the living room, lounge and kitchen, and a square hall containing cloakroom and small meter cupboard. The living room overlooks the garden, access to which is through a french window. The radiator in this room is heated by a slow-combustion stove in the kitchen.

At the rear side of the house is the kitchen, which is also half tiled, and has ample cupboard space. The stove provides constant hot water for all sinks, bath and radiators, and an electric or gas boiler and cooker are fitted according to the choice of the tenant. All ground floors are covered with tiles laid in colour according to individual taste.

Outbuildings provided are a coal-house, storeroom and toilet; garages

will be built on to all houses, at a later date.

As far as possible, the occupier's own ideas are incorporated in each house, e.g., choice of lighting and heating fitments, colour schemes, etc. A maintenance engineer, his wife and two children, who have been living with the wife's parents since 1939, are occupying the first house, and decided to have all-electric installations, including a refrigerator, and built-in television and radio sets. These added refinements are, of course, paid for by the individual tenant. Houses are allocated on a "points system," based on the number of years members have been married and the number of children in the family.

Total cost of each house is £1,450. Through the local authority, £14,300 has been borrowed from the Public Loan Board, and is repayable over 60 years. The houses also receive a subsidy of £16 each. Each house will be occupied on a weekly tenancy, and rent works out at about 22s. 6d. a week, plus rates.

## *All Work Voluntary*

All work is done voluntarily by members. There is only one paid, full-time man on the job—the foreman bricklayer—who is also responsible for general direction and discipline. Each man undertakes to work 26 hours a week (this may be increased in the summer months), and can only be excused work on production of a doctor's certificate. Any slacking is severely dealt with: the slacker loses "points" and drops lower on the allocations list. As most of the men are shift workers at the factory, building work goes on at all hours, including week-ends and at nights, when they work by the light of electric flares. Furthermore, if, once a man is occupying his own house, he slacks off before the rest of the houses are finished, he is penalised by having to pay the maximum rental.

No man is tied to the scheme. If he withdraws before the houses are completed he receives his initial deposit back, but loses the value of his labour. If, however, he has to leave his house later, when the scheme is completed, he can withdraw his full share of the association's assets.

While the company has given every encouragement to this project, and advised and assisted the housing association wherever possible, it has no control over the houses—they are in no sense "tied houses." The Association is completely independent, and is run by its own democratically elected officers. The chairman is Mr. A. Hill, who started the project, and the secretary and treasurer is Mr. F. J. Moore, a member of the process control staff at Dunlop, whose wife also assists with the typing. The works manager, Mr. A. R. Bloxham, is president. Members are mainly operatives from the Lastex yarn factory, but the idea is spreading at Fort Dunlop, and it is possible that other groups will be formed. The management believe that not only have the men satisfaction and pride in their achievement, but the possession of their own homes contributes much towards making stable and contented workers.

The pioneers themselves, however, have had their difficulties and disappointments. There was a point, before the mortgage was advanced, when they were without capital to carry on, but an appeal to members produced further amounts varying up to £100 from each man. During delays in negotiations, some of the original members lost heart and withdrew from the scheme, but others were found to take their places. When work started on the foundations it rained for a fortnight and the trenches were filled with water. There was no pump available and the water had to be bailed out with buckets. Materials were sometimes difficult to get, but these and other problems were overcome and the houses have been going up at a record rate. They are good houses too, solid, well-built constructions, passed by building experts as comparable to those built by experienced workmen.

What has been done at Fort Dunlop can be done elsewhere, given keenness and determination to see the job through, but it is essential that the scheme is properly organised and controlled. The rules of the Fortitude Housing Association Ltd., published by the National Federation of Housing Societies, are based on the experience of the Bournville Village Trust and similar projects, and ensure that all matters affecting the constitution and running of the association are taken care of. For example, the rules provide that a proportion of the profits accruing shall be allocated to a reserve fund to meet special contingencies, and the balance allocated to a common fund for charitable purposes. They also provide for the election of a tenants' committee, and for the appointment of arbiters to determine disputes, as well as for the more routine matters of control of finance, election and duties of officers, etc. The secretary of the Fortitude Housing Association has expressed his willingness to give the benefit of his experience to anyone wishing to start a similar scheme.

## "WARM HUMAN RELATIONSHIPS"

**"An enterprise which derives its power from personal contact and warm human relationships" was how Mr. John Oldham, O.B.E., referred to his firm, Oldham and Son Ltd., at the dinner they gave during Motor Show week to service station agents and distributors.**

# The Case for Older Apprentices

THE age and period of apprenticeship in Britain should be carefully examined by all industries, recommend the team which investigated the training of operatives in America on behalf of the Anglo-American Council on Productivity. In their report issued last month they draw attention to the fact that in U.S.A. a man can become an apprentice up to the age of 35.

They were favourably impressed by the way in which apprenticeship committees are used. Often the apprentice is not indentured to an individual employer, but to the local committee. This, the team think, would have possibilities in Britain, where the problem of apprenticeship in small firms is pressing.

America's best brains are going into industry, not the professions, state the team. American industry, they believe, seems to be moving towards the position where all supervisors will have university degrees, all journeymen and apprentices will be high school graduates, and most of the other employees will have had a high school education up to the age of 18.

Standards of technical education were not thought to be as high as in this country, but there is more effective liaison with local industry.

Here are some other points from recently issued productivity reports:

**Brass Foundry**—British brass foundries are ahead of those in the United States on the technical side, but output is higher in the U.S. owing to the greater incentive to earn, and the better use of mechanical aids and efficient layout. The report suggests that the British worker must decide whether he wants security and leisure or a better standard of living.

Canteens are conspicuous by their absence. Instead there are slot-machines for peanuts, chewing gum or soft drinks, and workers take only half-an-hour for lunch, often at the bench. This is the only break in an 8-hour shift, and many employees voluntarily resume work ten minutes before it is over.

**Footwear**—95 per cent of boot and shoe workers in the U.S.A. receive some form of incentive bonus as against 50 per cent in Britain. This is regarded as one of the main reasons for their higher output. But the investigating team maintain that many aspects of the British shoe manufacturing industry are unequalled, and on certain matters the American industry could benefit from its example and experience. The team found that there was no juvenile labour nor part-time workers in American factories.

**Lithographic Printers**—A recurring theme throughout this report is the establishment of confidence and mutual trust between employer and employee. It is suggested that many obstacles to higher production in Britain arise through antagonisms of the past, and through limitations imposed by the unions on the duties of skilled and semi-skilled personnel.

American semi-skilled workers have a chance to acquire craft status at any time during their working life. This incentive to learn, learn and to do more is not present to the same extent in Britain.

**Supervisory Training** — Supervisors, from foremen upwards, should be regarded as members of the management team and consulted and informed about company policy. This implies that they should be carefully selected and trained. American management is giving considerable thought to training in human relations, and this predominates in all supervisory training schemes. Responsibility and authority are more decentralised in American industry, and supervisors are paid a reasonable margin above maximum operative earnings, and enjoy managerial privileges.

## Separate Inspectorate for Wales

THE Ministry of Labour and National Service has decided to set up a separate division of the Factory Inspectorate for Wales.

The inspectorate is organised on a basis of districts grouped in divisions, but there has never been a separate division for Wales. South Wales districts have been grouped with districts in the South-west of England and North Wales districts with districts in the West Midlands. The new division will be under a separate superintending inspector.

## New College for Blind Workers

THE first residential commercial college in London for training blind persons as shorthand-typists and telephonists was opened last month by Sir Brunel Cohen, chairman, National Advisory Council on Employment of the Disabled. There is room at the college for twenty-four men and women in the shorthand-typists' course, which lasts a year, and for twelve in the two months' course for telephonists.

## Italian Labourers for Railways

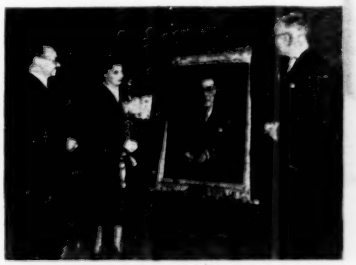
ABOUT 150 Italian labourers have arrived in Britain for employment on the railways. This is the vanguard of 1,000 engaged by the Railway Executive to help meet the manpower shortage.

Up to 30,000 vacancies—including 9,000 for track workers—exist in the service. Efforts are being made to increase mechanical aids to save manpower on permanent way work.

## "Train Boys for Two Jobs"

SIR GODFREY INCE, Permanent Secretary, Ministry of Labour and National Service, speaking at the annual meeting of the British Association for Commercial and Industrial Education, said that the extension of compulsory education to fifteen and modern training methods made long apprenticeships unnecessary.

He asked: "Why must a young man be trained for one job only? If intensive methods of training were adopted, would it not be possible to train a young man in two skilled crafts in the time it now takes to train him in one?"



**Mr. E. K. Cole, chairman and founder of E. K. Cole Ltd., with Mrs. Cole, admires the portrait of himself painted by Frank O. Salisbury, C.V.O., and presented to him by his employees. The presentation was a part of the firm's 25th anniversary celebrations, which included a visit by 6,500 employees and friends to "Rose Marie on Ice" at Harringay Arena. The task of transporting, feeding and seating this large number was ably carried out by a joint management-and-workers committee.**

## New Minister's Manpower Report

SIR WALTER MONCKTON, Minister of Labour and National Service, outlined the serious manpower shortage when he met representatives of the employers, unions and nationalised industries at the quarterly meeting of the National Joint Advisory Council last month. It was reported that while the number of people in civil employment in August showed an increase of 1 per cent over the previous year, there were 446,000 unfilled vacancies, an increase of 80,000 over 1950. Some 110,000 of these vacancies—over 32,000 more than in the previous year—were in the metal manufacturing, engineering and vehicles group (including aircraft manufacture).

Against this labour shortage were the heavy and urgent demands of rearmament and exports. When rearmament was in full swing it was estimated that 400,000 to 500,000 more workers would be needed for defence production. Most of this expansion would be in the engineering and vehicles group—aircraft factories and R.O.F.'s alone would need 175,000 more workers.

The first step contemplated by the Government in mitigating the shortage is to reduce supplies of raw materials to producers of non-essential goods and thereby free labour for defence and export orders. Pressure will be put on both sides of industry to secure, through joint consultation, that labour is fully employed and that machinery is being used to capacity. There is some speculation about some form of control to guide people into essential industries.

## Miners' Welfare

ANNUAL report of the National Miners' Welfare Joint Council states that grants amounting to £839,207 were paid from the Miners' Welfare Fund during 1950. Twenty-four new canteens were built, and another forty-eight were in various stages of preparation. Most of them were being built as part of new pithead baths. By the end of last year, 413 pithead baths were in use, including twenty-one new baths. Another fifty-four baths were under construction.

## Security Preferred

AMONG the 17,000 workers of Joseph Lucas Ltd., security and continuity of employment are valued above high wages.

Asked "What do you value most in your job?" entrants in a works competition voted as follows:

1. Security and continuity of the job.
2. Interest in the job.
3. Welfare facilities and working conditions.
4. High level of earnings.
5. Prospects of advancement and recognition of merit.
6. Opportunity to contribute to the success of the company through joint consultation.
7. Fair and able supervisors.

## WAGES NEWS

**AIR CONTROL OFFICERS**—Air traffic control officers employed by the Ministry of Civil Aviation have received salary increases ranging from £90 to £200 a year under a recent award of the Civil Service Arbitration Tribunal.

**BUILDING WORKERS**—Claim for an increase of 22s. a week, or 6d. an hour, has been submitted to the employers by the National Federation of Building Trade Operatives. It affects about a million building workers.

**DOCK WORKERS**—Proposals for an increase of 5s. a day in the pay of all dock workers are being submitted by the National Amalgamated Stevedores and Dockers to the Transport and General Workers' Union and other unions with members in the port industries. It is hoped to gain their support for a combined approach to the employers.

**FARM WORKERS**—Increased minimum wage rates for farm workers have been confirmed by the Scottish Agricultural Wages Board. New rate for adult male workers is £5 8s. a week, with a common adult specialist's rate of £5 17s. 6d., and £6 a week for shepherds. Minimum rate for women of 18 and over, £3 14s. 6d.; specialists, £4 2s.

**GAS WORKERS**—About 100,000 adult gas workers received a pay increase of 2d. an hour by agreement of the National Joint Industrial Council for the Gas Industry.

**RAILWAY WORKERS**—Wage increases of 8 per cent have been awarded by the Railway Staff National Tribunal. Increases affect about 442,000. The original union claim was for an increase of 10 per cent.

**SUB-POSTMASTERS** — More than 22,000 sub-postmasters have received a pay increase of 17 per cent by an agreement between the National Federation of Sub-Postmasters and the G.P.O. It will cost £1,350,000 a year.

**TRANSPORT WORKERS**—London bus, tram and trolley-bus workers have received a wage increase of 8s. 6d. per week, as a result of agreement between London Transport Executive and the Transport and General Workers' Union.

**TEXTILE WORKERS**—Nearly 50,000 workers in the bleaching, dyeing, printing and finishing sections of the textile industry in Lancashire, Yorkshire, Cheshire and Derbyshire have received wage increases under the new cost-of-living agreement. In the present quarter, men receive an additional 10s. 1d. a week and women 7s. 4d., with corresponding increases for juveniles.

**Dr. John Almeyda, Harley Street consultant, supervises this surgery of Thomas De La Rue's security printing factory at Bunhill Row, London. He is seen here with a patient for ray treatment, part of the regular work of the surgery which includes physiotherapy, pre-employment examination, and gastric treatment, as well as minor accidents and illness.**

## ACCIDENT INVESTIGATIONS

*Cont. from page 249.*

promptness with which they are put right.

To an alert management, an accident is a symptom of inefficiency. And just as it is useless for a doctor to cure a symptom without curing the disease, so it is useless to deal with the immediate cause of an accident without digging down to the fundamental causes and their implications. The investigation of an accident—whether carried out by foreman, safety officer, works safety committee, or works manager in person—should therefore aim at answering the following questions:

1. *Was there an unsafe act on the part of an employee and, if so, why was it committed?* If the victim, or some other person, has helped to cause the accident by behaving in an unsafe way, it is useless to leave the matter there and account for the accident by the far too common term "failure of the human element." An attempt must be made to find *why* the employee did what he did do. There may, of course, be no answer to this question; the person concerned may have been guilty of one of those inexplicable lapses that baffle the most skilful investigator. But it is far more likely that the unsafe act can be traced to a definite fault—lack of proper training, poor supervision, the following of a bad example set by other workers, unsuitability for the job, or a combination of these and other causes. Once again, the investigation would have revealed a state of affairs that was probably affecting production as well as safety.

### *Check Maintenance*

2. *Was there any physical hazard which contributed to the accident, and why had it not been removed?* A slippery stairway, an unsafe chain, or a defective piece of electrical apparatus is an enemy both to safety and to production. When such defects are found, the reason for them should be investigated; it may be found that there is something wrong with the system for inspecting and maintaining plant.

3. *Were the environmental conditions as good as they could have been?* It has already been pointed out that a thorough accident investigation may lead to the discovery of inadequate lighting. It may also lead to the discovery of inadequate ventilation—causing drowsiness and headache—or to inadequate heating—causing coldness of hands and lack of dexterity. Glare from an unshaded skylight, excessive noise, and even a colour scheme that has a bad effect on the eyes, are other examples of poor environmental conditions and any one of them may be brought to light in the investigation of an accident.

4. *Was the job being done in the most efficient way?* This is a question which is far too rarely asked. Many people, when investigating an accident, tend to regard the job method as an unalterable factor and assume that any improvement to make the work safer must be made within the frame of that method. Nothing could be further from the truth. On occasions, the only way to make the job really safe may be to change the method completely and it is more than likely that the new method, when devised, will be quicker as well as safer. Such, at least, has been the experience of some managements who have found that what starts as an enquiry into the reason for an injury may end as the replanning of a process, causing production to rise at the same time as accidents fall.

## FOOT SAFETY ON WHEELS

**This store-on-wheels—a converted semi-trailer—brings safety footwear to small factories in the Westinghouse (U.S.A.) organisation. Employee co-operation in wearing safety shoes cut foot accidents by 36 per cent in a year in one factory in the group.**

## Safety Training For Young Workers

PERSONNEL managers and welfare officers in the Midlands have welcomed the launching by the Birmingham and District Industrial Safety Group of a junior safety section. The group's chairman, Mr. W. W. Foster, points out that whereas the large firms have an internal organisation that trains young workers in safety techniques, the majority of small firms have no such scheme, and the new section is designed mainly to help firms employing fewer than 500 persons.

The group's plans for developing the project are comprehensive and include first-aid training. It is proposed that the section should meet every three months, with the firm's representatives "spreading back" to fellow operatives the knowledge acquired at meetings.

## *The Complete Foreman —American Pattern*

INTERVIEWS with 110 hourly-rated employees at three companies in the Greater Boston area showed that employees expect justice, courtesy and consideration from their foreman. The majority also agreed that a good foreman must:

Be technically competent.

Know thoroughly how well (or how badly) each of his men did his work, so that good workers could be recognised and bad ones prevented from "getting away with it."

Have reasonable control over his group.

Be straightforward and decisive.

Not be over-familiar with his men. "Mixing" on the job—approved; off the job—not approved.

All indicated that they looked to their foreman for help and service, but the more independent types resented too much supervision or any suggestion of intrusion into their private affairs.

The investigators suggest that the good foreman should not "look over his men's shoulders," and should give only minimum supervision except where he knows more would be welcome.

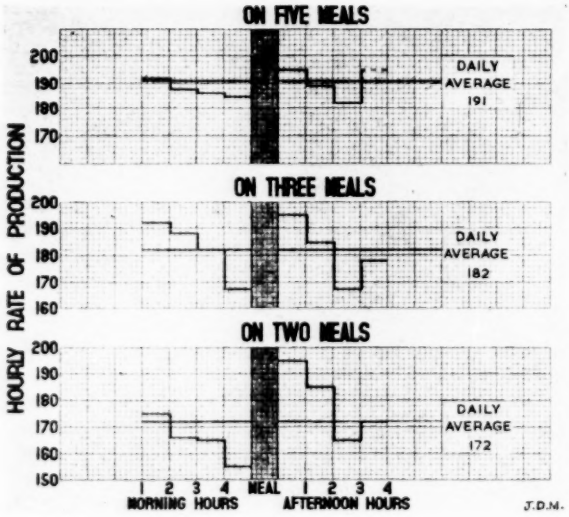
(Condensed from *Personnel*, 9/51.)

Mr. W. J. Izzard, speaking to the London section of the Institute of Industrial Supervisors about his recent visit to the U.S.A. as a member of the team studying training of supervisors, stated that many American firms give psychological tests to determine emotional stability, leadership qualities and other characteristics, before training potential supervisors. The applicant must also be physically fit, have reliable technical knowledge, and be able to read, write and understand elementary arithmetic.

# Output Rises On Five Meals A Day . . . . .

**The human machine seems to work best when fed on the principle of "little and often." Painstaking study by the Chief Welfare Officer of a shoe factory established beyond doubt the fact that too long a gap between meals results in output losses. The writer of this article is a well-known industrial caterer and author of "Successful Canteen Management."**

By J. DOUGLAS MITCHELL




FEW would deny that good canteen service has a beneficial effect on industrial productivity, but it is not perhaps so generally realised that the frequency with which meals are consumed during the day has a most marked effect on workers' output.

During the war, when I was Assistant Controller of Canteens to the Ministry of Supply, I was a regular visitor to a large gun factory in the Birmingham area. The factory manager was really canteen-minded. He appreciated the significance of a well-run canteen not only on the well-being and contentedness of his staff, but also on production. He was fortunate, too, in that the manageress of the canteen was well trained, proficient, and appeared to take a delight in her work.

The manager explained to me that every machine tool in the works was connected up to an electric recording system, which registered every effective operation of individual machines, and linked up those recordings with a master recording chart.

Showing me this master chart, he drew my attention to the rise and fall of the number of effective operations carried out on the machines. Starting off at high level in the morning, they began to taper off as the time for the mid-morning break drew near. After the break, output climbed, only to taper off again as the dinner hour approached.

A very high percentage of the workers patronised the midday meal in the canteen. The dinner break was an hour, which allowed time for proper digestion of the meal and some relaxation. The afternoon's output reached the same high level, to begin with, as that of the earlier part of the morning, and thenceforward the curve followed similar lines to those of the morning. That chart certainly painted a graphic picture of the potentialities of the human machine when judiciously fed at suitable intervals.

## *Meal Patterns*

Here is another illustration of the same point. The chart reproduced above shows the production during one day in a big shoe factory. The numbers 150 upwards to 200 represent pairs of shoes, the figures having been prepared after patient work by the chief welfare officer. By personal contact with the workers he found out their individual meal patterns. By meal pattern I mean (a) the number and type of meals they ate at home (b) what they ate in the canteen and (c) the approximate amounts of food they ate.

With this information, it was possible to divide the workers into groups according to the number of meals eaten each day, and then to relate the average output of each group according to their piecework earnings.

The five-meal pattern consisted of breakfast at home, "elevenses," dinner in the canteen, afternoon tea (short break), and high tea or supper at home.

The three-meal pattern comprised breakfast at home, dinner in the canteen and high tea at home.

A cup of tea at home, dinner in the canteen and high tea at home made up the two-meal pattern.

As the chart shows, the five-meal pattern easily wins for both volume and consistency of output. Each pattern shows clearly the impact of nourishment on productivity.

I would put in a special plea to the canteen manager or manageress. It is this. When planning a meal, make it part of a pattern, so that it goes some way towards remedying, if possible, the deficiencies of that particular pattern. For example, it is often said that the pattern of the average housewife's meal is bread and spread and something to drink with it. Why? Because she is an overworked and overtired person, and because she is saving the cookable portions of the daily rations for those meals at which her menfolk are present. Therefore, the canteen manager should bear this in mind when planning meals for the women, some of whom are housewives as well as factory workers.

---

Mr. J. M. Bridges has been appointed chief personnel officer of T. Wall and Sons Ltd.

# *New Industrial Equipment*

## EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

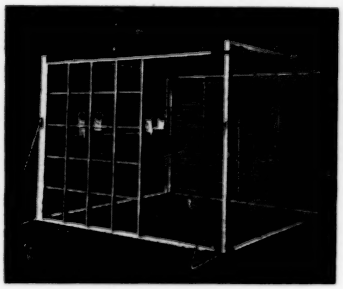
### WELFARE

**Readers who wish to have more particulars of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph.**
**We are always glad to receive details of new products suitable for description here, e.g., equipment that helps in any way to raise output.**

### Adaptable Chair

THE High-Low industrial chair is instantly adaptable to any job at any height from 19 in. to 29 in. The seat revolves, and by rotating the base the footrest is adjustable to suit various seat heights. Construction is all steel, with a resilient seat, reinforced. Total floor coverage is contained within a circle 2 ft. 2 in. in diameter, weight is 16 lb., and spread of legs 1 ft. 11¼ in. (square). **(PM/432.)**

### Portable Gymnasium



DESIGNED for use in a confined space, the Manchester primary gymnasium is made in two L-shaped sections which can be stored in the corner of the room when not in use. Fitted trolleys are provided to assist this arrangement and the two sections can be quickly locked together, and the frame lowered to the floor. British Columbian pine is used for the frame and the window ladder and wallbar rungs are of ash.

The apparatus consists of an adjustable beam, window ladder, wallbars, climbing ropes, handrings and ropes, trapeze bar and beam saddles. Its name recalls the fact that it was originally designed to meet the requirements of the physical training organiser of the Manchester Corporation education committee. **(PM/433.)**

### SAFETY

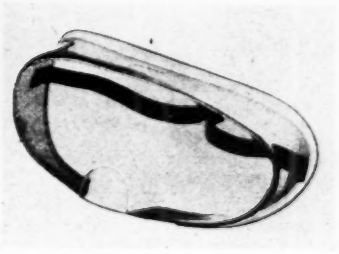
### Inspection Lamp

A NEW and improved version of the Nife self-contained portable inspection lamp has been produced. Capable of projecting a long-range, high candlepower beam, the equipment, type P.6, was designed primarily for the inspection of overhead power transmission lines. It consists of a 6·8 v. nickel-cadmium alkaline battery of miners' lamp design, carried on the back of the operator and connected by flexible cable to a projector incorporating a double filament, high-efficiency bulb. Of all-steel construction, the battery comprises six cells of sufficient capacity to provide three to four hours' light on the major 18-watt filament, and about twenty hours on the 3-watt reserve. It can be left charged for indefinite periods without risk of deterioration.

A push on/off switch is positioned by the projector handle to allow for easy one-handed control. In use, the battery is contained in a leather case, and this, together with a leather bag for the projector, is attached to a carrying harness to give the maximum comfort and minimum fatigue when the user is covering rough ground. Specification: dimensions of battery case, 10¾ in. by 8¼ in. by 1¼ in.; weight of complete equipment, under 14 lb.; battery-charge rate, 2 amps. for 7 hrs.; maximum candlepower, 15,000. **(PM/434.)**

### Kind to the Nose

IMPROVEMENT in eye protection devices continues. New on the market are Safespex, designed to give complete protection without discomfort to the bridge of the nose and the ears. Safespex rest on the cheek bones and forehead, an elastic band holding them in place. They are splinterproof and ventilated, and may be had in various colours to suit individual requirements, e.g. green for welding, red for X-ray work, grey/blue for sun glare, and clear for general use. They can be worn comfortably over prescription spectacles.



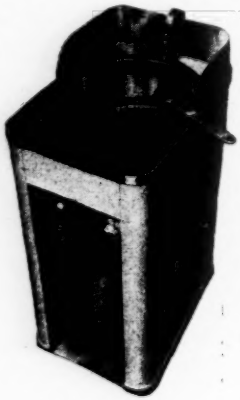
Safespex are made of Perspex, and are of an agreeably light weight. **(PM/435.)**

## CANTEEN

### Fast Fryer

A SAVING of 40 per cent frying oil is claimed for the Turmix fryer, which is equipped with a mobile heating element and thermostatic control. Speed in frying is brought about by the fact that the element is submerged in the oil, heating thus being instantaneous. Five minutes' preheating is required. Temperature variations of over 8° F. are immediately stabilised by the thermostat, which also prevents burning of the oil and encrustation of the element and inner surfaces of the pan.

The oil is cleansed by means of a conically-shaped recess. All deposits sink below the element into oil which, at that level, has a temperature of barely 86° F., and they can then be

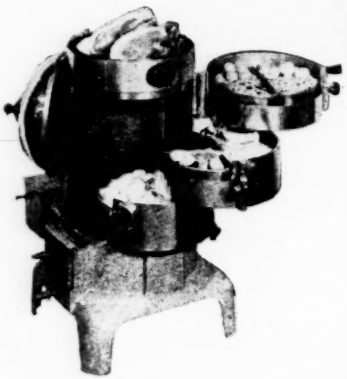


run off through draining taps. An automatic cut-out prevents damage if the element is switched on dry, and a signal lamp indicates current "on." Production of well cooked, tasty food is facilitated by the maintenance of a constant maximum temperature, preset. **(PM/436.)**

### 3-in-1 Appliance

THE Crypto-Rotapan is designed to cook, conserve and revive all classes of foods. Steam operated, it cooks a variety of foods simultaneously without inter-taint of flavours, mushing or disintegration. As a conserver it keeps cooked dishes both moist and hot. All types of cooked foods—whether tinned, roasted, baked, boiled or steamed—can be revived in the Rotapan, even after they have been allowed to remain cold for several hours. Revivification takes only a few minutes.

Gas, electric and steam coil models are available. Approximate capacity is 3½ cu. ft., and there is space in the top tier for cooking large joints. The rotating pans are easily swung into and out of the heat zone. The automatic water feed is arranged to minimise the leakage of grease and residues from the



boiling tank to the balancing tank. Equipment provided comprises circular aluminium pan and cover, with lifting handles, for stews, fruit, etc.; circular wire basket for vegetables; and six plain and two perforated aluminium segment dishes. Dimensions: height, 4 ft. 4¾ in.; depth, 2 ft. 6¼ in.; width (tiers closed), 2ft. 9¾in. (open) 4 ft. 1½ in. **(PM/437.)**

### Portable Canteen

HERE is a portable building which can be carried to site on a hand trolley, erected by three unskilled men in about an hour, and dismantled in half that time. Its name is the Uniport Altent, and it is made entirely of aluminium. Among its uses are as a canteen (especially on building sites, etc.), a medical centre, a store or small workshop, a temporary office, a trans-

former house, and so on. Two sizes are available—the Senior (14 ft. 4 in.

diam., 6 ft. 7 in. high at the eaves, and 10 ft. to the apex, floor space 160 sq. ft.), and the Outsize (17 ft. 6 in. diam., floor space 240 sq. ft.).

The Altent ("aluminium tent"), when dismantled, consists of nesting panels. Doors and windows can be had to choice, and ventilating collars and passage panels—to join two Altents—are available. Walls can be lined if desired. **(PM/438.)**

## POWER TOOLS

### Filing Machines

THE Diprofil power-operated hand-filing machine has been developed to eliminate the fatigue and physical strain of hand-working operations normally associated with the manufacture of punches, dies, moulds and all precision tooling. Weighing less than 1 lb. and conveniently held in one hand, this reciprocating unit enables filing, lapping, scraping, honing and polishing to be carried out. Speed of operation is governed by a foot control enabling the number of strokes to be varied from zero to 120 strokes per second, while the length of stroke can be

adjusted from zero to 6 mm. (.236 in.). The balance of the unit is automatically compensated for different strokes and speeds. During use the cutting tool is left free to rotate about its longitu-

dinal axis although it can be locked in position if required.

Specially designed diamond-impregnated files are provided for working hardened steels, minerals and glass.

For the lapping and polishing of varied surfaces, an extension arm and diamond lapping disc combine the reciprocating action of the unit with a rotary movement. **(PM/439.)**

## COMPRESSED AIR

### Clean, Dry Pipes

ILLUSTRATED is the Aridifier, one of two devices designed to keep compressed air pipelines clean and free of water. Used in conjunction with the Water Trap, the Aridifier extracts moisture from the air passing through it. Its efficiency is determined by air velocity.

Standard patterns will deal with pressures up to 150 lb. per sq. in. (higher pressures to order). Inlet and outlet pipe fixings may be small compared to the pipe size in use. Since the air passes through the restricted area for a few inches only, drop in pressure or choking is negligible, provided the correct size Aridifier is used. The Water Trap provides automatic draining of low points in compressed air mains and receivers. It operates continuously or intermittently, according to the volume of water. **(PM/440.)**

### Mobile Compressor

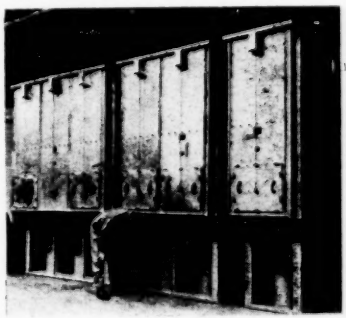
THIS new mobile compressor set, with a working pressure of 100 lb. per sq. in., can be supplied with either electric motor or petrol engine. It is 55 in. long, 23 in. wide and 37½ in. high, with a displacement of 11 or 13.6 cu. ft. per min. Mobility is helped by careful weight distribution, conveniently set handles and rubber-tyred wheels. The small width permits easy passage through door openings. Typical uses for the set are spray painting, powder dusting, liquid spraying, or work with pneumatic tools. It can

operate two paint spray guns simultaneously or a battery of pneumatic tools.

This compressor, apart from its own general purpose uses, is also being sold in complete "ready to use" special purpose outfits. These include a power-operated liquid spraying and spray-painting equipment. Accessories available include suction feed spray guns, pressure feed containers, air hose, spray lances and nozzles and air power tools. **(PM/441.)**

## DUST DISPOSAL

### Fine Filter



THE Drytube is a fabric sleeve-type dust filter built to handle fine, dry dusts where a high collection efficiency is required. It is made in a range of sizes and in three patterns—Type A, collecting chamber; Type B, with hoppers and rot-proof canvas bags; Type C, with hoppers and quick-release bins. Hand-operated shaker gear is provided. Fabric filter bags, the bottoms of which are attached by quick-release straps to spun spigots on the dust chamber, are used as the separating medium. The sealed tops of the bags are fitted with loops so that they are easily attached to the shaker gear. The main housing is of weather-proofed steel, with galvanised sheet steel outer panelling. Larger sizes have walkways and cat ladders. **(PM/442.)**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# What Every Personnel Manager Ought to Know

**Personnel Management and Welfare.** F. C. Brook. Burke Publishing Co. Ltd. 21s.

THIS is a timely book. The need for a contented, co-operative working population was never greater than it is today, and the personnel manager has an increasingly complex and exacting job to do in helping to meet that need. He is likely to find that, as the difficulties of recruiting and retaining labour grow, the scope of his work is being extended, willy-nilly, to include the provision of some services with which he is only hazily acquainted. *Personnel Management and Welfare* is his textbook.

It is all here—labour supply and training; the maintenance of employee records; the work of the welfare department; how to run a safety organisation; the medical department's job; selection, engagement and training of staff; the functions and application of industrial psychology; factory catering; and, indeed, every other aspect of that widespread branch of human relations known as personnel management. It seems fair to say that the book covers all personnel procedures, methods and systems. The down-to-earth, severely factual text is elaborated with many specimen forms and tables.

To the student, the book should be of great value. It should also be compulsory reading for every applicant for a job in personnel management; its contents provide a salutary lesson for those—alas, too numerous—individuals who apparently believe that "this welfare business" consists mainly of a little back-slapping and the organisation of a social once a week.

## *Going Through the Mill*

**Textile Organisation and Production.** A. E. Clifford. Carter Publications. 25s.

THIS book should be of interest and value to the directors, managers and supervisory staff of all types of textile mills, and to students. The coverage is comprehensive, ranging through types of organisation, principles of management, budgets, work evaluation and incentives, material control, manufacturing costs, plant layout, personnel management, etc.

The two themes have been broadly treated, and references to specific sections of the trade have been avoided.

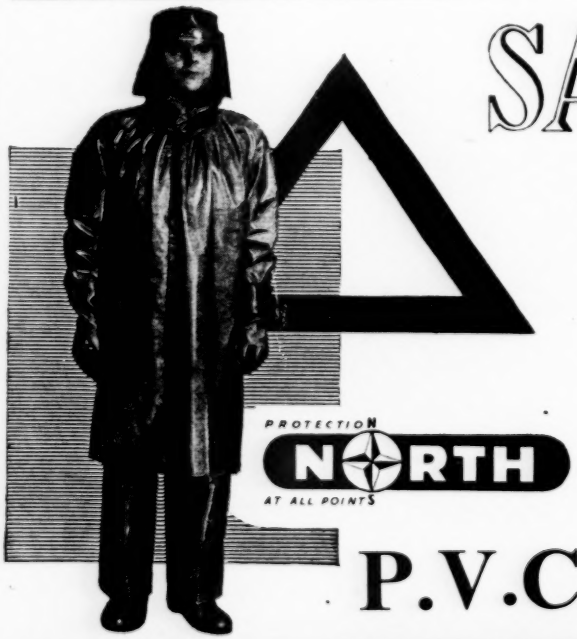
## *Pay Critic*

**Methods of Wage Payment in British Industry.** Norman C. Hunt. Pitman. 18s.

"HOWEVER good, technically, a system of wage payment may be, if it has not the confidence and goodwill of all concerned it is doomed to failure."

That is the theme of this book, which examines critically the various methods of industrial remuneration. As the publishers claim, *Methods of Wage Payment in British Industry* fills a gap in British management literature, for although the Americans have published plenty on the subject, we in this country have not.

Mr. Hunt writes as an idealist, but one whose idealism is tempered by expert knowledge.


SAFETY . . .

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# *Summary of Official Publications*

## READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

### STATUTORY INSTRUMENTS

**No. 1766 (S.91). The Fire Services (Conditions of Service) (Scotland) Amendment No. 3 Regulations, 1951.** Dated October 3, 1951, made by Secretary of State for Scotland under sub-section (1), Section 17, Fire Services Act, 1947(a). *H.M.S.O.* 3*d*. (Provide that: years of service prior to the age of 20 cannot be counted in assessing a firewoman's pay; subsistence allowances be determined by the authorities instead of by Regulation; value of free meals be increased; payment be made to members who give civil defence instruction; certain amendments be made to method of calculating allowances for members who are promoted. Operative from October 8, 1951.)

**No. 1767. The Fire Services (Ranks and Conditions of Service) (No. 4) Regulations, 1951.** Dated October 3, 1951, made by the Secretary of State, under Sub-section (1), Section 17, Fire Services Act, 1947(a). *H.M.S.O.* 3*d*. (As for No. 1766[S.91]).

**No. 1768. The Fur Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1951.** Dated October 3, 1951, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O.* 4*d*. (Amends Order Z (49) by increasing statutory minimum remuneration payable. Operative from October 22, 1951.)

**No. 1769. The Keg and Drum Wages Council (Great Britain) Wages Regulation Order, 1951.** Dated October 3, 1951, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(c). *H.M.S.O.* 4*d*. (Revokes Order K.D.(36), and fixes new statutory minimum remuneration payable. Operative from October 19, 1951.)

**No. 1788. The Fur Wages Council (Great Britain) Wages Regulation (Holidays) (No. 2.) Order, 1951.** Dated October 4, 1951, made by Minister of Labour and National Service Under Section 10, Wages Council's Act, 1945. *H.M.S.O.* 4*d*. (Revokes Order Z.(51), and fixes annual and other customary holidays allowed. Operative from October 2, 1951.)

**No. 1800. The Trade Boards and Road Haulage Wages (Emergency Provisions) (End of Emergency) Order, 1951.** Dated October 4, 1951, made by H.M. the Queen and H.R.H. Princess Elizabeth under Sub-section 3, Section 4, Trade Boards and Road Haulage Wages (Emergency Provisions) Act, 1940(a). *H.M.S.O.* 2*d*. (Ends provisions of the 1940 Act.)

**No. 1801. The National Insurance and Industrial Injuries (Reciprocal Multilateral Agreement) (Belgium) Order, 1951.** Dated October 4, 1951, made by H.M. the Queen and H.R.H. Princess Elizabeth, under Section 64, National Insurance Act, 1946(a) and Section 85, National Insurance (Industrial Injuries) Act, 1946(b). *H.M.S.O.* 4*d*. (Provides for reciprocal arrangements with Belgium in relation to National Insurance and Industrial Injuries benefits. Operative from October 5, 1951.)

**No. 1844. The Baking Wages Council (England and Wales) Wages Regulation (Holidays) (Amendment) Order, 1951.** Dated October 15, 1951, made by Minister of Labour and National Service under Section 10, Wages Council's Act, 1945(b). *H.M.S.O.* 2*d*. (Amends Order BK(42) and provides that in certain circumstances holidays may be allowed during periods other than between the middle of April and end of November. Operative from October 31, 1951.)

**No. 1845. The Wages Regulation (Licensed Residential Establishment and Licensed Restaurant) (Amendment) Order, 1951.** Dated October 17, 1951, made by Minister of Labour and National Service under Section 8, Catering Wages Act, 1943(a). *H.M.S.O.* 3*d*. (Amends the principal Order by increasing statutory minimum remuneration payable to workers other than extra head waiters, waiters and waitresses. Operative from November 5, 1951.)

**No. 1867. The Boot and Shoe Repairing Wages Council (Great Britain) Wages Regulation Order, 1951.** Dated October 22, 1951, made by Minister of Labour and National Service under Section 10, Wages Council's Act, 1945(c). *H.M.S.O.* 1*s*. 3*d*. (Revokes Order D.(97) and D.(100), and fixes new statutory minimum remuneration payable. Operative from November 9, 1951.)

**No. 1870. The Retail Bespoke Tailoring Wages Council (England and Wales) Wages Regulation (Amendment) Order, 1951.** Dated October 23, 1951, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O.* 3*d*. (Amends Order R.B. (36) by increasing statutory minimum remuneration payable. Operative from November 9, 1951.)

### GENERAL

**Tables Relating to Employment and Unemployment in Great Britain, 1948, 1949 and 1950.** Issued by Ministry of Labour and National Service, October, 1951. *H.M.S.O.* 3*s*. 6*d*.

**Choice of Careers.** New Series No. 4—Librarianship. No. 18—Wood Sawyer and Woodcutting Machinist. No. 26—The Law: Barristers and Solicitors. Issued by Central Youth Employment Executive. *H.M.S.O.* 6*d*. and 1*s*. respectively.

**Careers for Men and Women.** Building Industry—Managerial Executive and Technical Posts. Issued by Ministry of Labour and National Service. *H.M.S.O.* 6*d*.

**Water Problems in Fire Fighting Explained.** (R. Killey) 1st ed. Issued by Home Office, Fire Service Department. *H.M.S.O.* 1*s*. 6*d*.

**Heat Loss from Dwellings.** Building Research Station Digest No. 35. Issued October, 1951. *H.M.S.O.* 3*d*.

**Support at Roadheads.** Memorandum on falls of ground. Issued by Ministry of Fuel and Power, October, 1951. Safety Pamphlet No. 28. *H.M.S.O.* 6*d*.

**Health of Welders.** Issued by Ministry of Labour and National Service, October, 1951. *H.M.S.O.* 3*s*. (See also page 298 of our November issue.)

**Civil Defence.** Manual of Basic Training. Vol. I. Pamphlet No. 8. Principles of Damage Control. Issued by Home Office, October, 1951. *H.M.S.O.* 1*s*.

### INDUSTRIAL COURT AWARDS

**No. 2340. Thermal Insulation Industry.** Reference: Claim for increase of 4d. per hour in minimum rates, and a minimum of two weeks' holiday with pay. Award: Increase of 2d. per hour in minimum rates; in favour of two weeks' paid holiday. (28/9/51.)

**No. 2341. Insurance Industry.** Reference: For introduction of specific salary scale. Award: The Court awarded salary rates ranging from £2 12*s*. per week at 16 years of age to £8 12*s*. at 33 for males, and from £2 5*s*. at 16 to £6 at 29 for females. The question of a further scale for both male and female staff, with details of duties to be performed, was referred back for negotiation between the parties. (5/10/51.)

**No. 2342. Catering Industry.** Reference: Claim by unions for increase of 10*s*. a week for specific grades of labour employed by National Service Hostels Corporation Ltd., and counter claim by emp'oyers that evaluation of board and lodging for resident workers be increased to 31*s*. 6*d*. a week. Award: Increase of 4*s*. a week for all grades concerned, and agreement that evaluation of board and lodging be increased to 31*s*. 6*d*. a week. (10/10/51.)

**No. 2343. Government Establishments.** Reference: That men at Air Publications and Forms Stores, handling printed matter and stationery, be paid printing trade rates. Award: Claim not established. (17/10/51.)

**No. 2344. Government Industrial Establishments.** Reference: That cinema projectionists employed by H.M. Stationery Office be paid rates laid down by agreement of January 1, 1950. Award: That revised rates offered by H.M. Stationery Office in April, 1951, be applied. (25/10/51.)

**No. 2345. Government Industrial Establishments.** Reference: That men graded as slingers and riggers in the engineering department (machinery) be paid M + 16*s*. and be graded as riggers. Award: That men graded as riggers and at present paid M + 13*s*. be paid M + 15*s*.; the rest of the claim was not established. (25/10/51.)

**No. 2346. Government Industrial Establishments.** Reference: Claim for reinstatement of discharged employee. Award: In favour of workman. (26/10/51.)

### INDUSTRIAL DISPUTES TRIBUNAL AWARDS

**No. 23. Wages of Certain Workers Employed by Four Firms in Edinburgh and Leith Engaged in the Corn Trade.** Claim: For wage increase of £1 a week. Award: Claim not established. (26/9/51.)

**No. 24. Payment of Differential Rate to Certain Workers Employed by the Kingswood Urban District Council.** Claim: That motor drivers employed on refuse collection be paid "plus rate" of 6*s*. a week as from March, 1949. Award: Claim not established. (26/9/51.)

**No. 25. Claim in Regard to the Payment which should have been made to Certain Workers Employed in the Engineering Industry in Coventry and District during the Period they were under Notice of Termination of Employment by Reason of the Fuel Crisis of 1947.** Award: The Tribunal found that workers whose period of notice coincided with their pay week were entitled under the "Guaranteed Week" to payment equivalent to hourly paid time rate for 34 hours; those whose period of notice did not coincide with their pay week were entitled to proportionate payment in respect of that part of the second pay week which fell within the period of notice. (27/9/51.)

**No. 26. Rates of Wages of Certain Workers Employed by the Swansea Corporation.** Claim: That basic rates of all non-craft manual workers in non-trading departments be 110*s*. a week of 44 hours, and that basic rates of school caretakers be increased by 2*s*. 9*d*. a week of 44 hours. Award: In favour of increasing the wages of non-craft workers employed in the Water Department by 2*s*. 9*d*. a week; the latter part of the claim was referred back to the parties for negotiation. (2/10/51.)

**No. 27. Rates of Wages of Certain Workers Employed by a Firm of Portable Metal Building Manufacturers at Sudbury, Suffolk.** Claim: That company observe terms of employment not less favourable than those of engineering agreements dated November 28, 1950. Award: In favour of workmen. (2/10/51.)

**No. 28. Grading of a Female Worker Employed by the Salford Corporation.** Claim: Dispute regarding grading of a Sister employed at O'd People's Home. Award: Claim not established. (2/10/51.)

**No. 29. Wage Rates of Certain Workers Employed by an Electrical Engineering Company at Rugby.** Claim: That basic rates of tipped tool and cutter grinders be increased by 11*s*. a week in accordance with specified agreement. Award: In favour of claim as it affects Grade A men at the maximum scale; as regards other workers, the claim was not established. (3/10/51.)

**No. 30. Claim for Overtime Payment to Certain Shift Workers Employed by a Fireclay Mining Company in Scotland.** Claim: That kilnburners working 12-hour shifts be paid overtime rates for hours worked in excess of 8 per day. Award: Claim not established. (4/10/51.)

**No. 31. Rate of Wage and Hours of Work of Certain Workers Employed by a Firm in**

**London Engaged in the Manufacture of Adhesive.** Claim: That minimum rate for adult male workers be 3s. per hour for a normal working week of 44 hours. Award: In favour of workmen. (8/10/51.)

**No. 32. Wages and Working Conditions of Certain Workers Employed in the Fish Market and Curing Houses at Grimsby.** Claim: For variations in current agreement. Award: The Tribunal awarded that: the normal working week be 45 hours; two weeks' paid holiday to be granted after completion of one year's service; minimum rates for male workers to range from 42s. 6d. a week at 15 to 115s. at 21 and over, and for female workers, 30s. at 15 and 75s. at 20 and over. (10/10/51.)

**No. 33. Terms and Conditions of Employment of Certain Workers Employed by the River Wear Commissioners.** Claim: For specified terms and conditions of employment. The tribunal awarded as follows: (a) work performed on statutory holidays to be paid at double-time rate, and workers also to receive a day off in lieu (b) guaranteed pay for incidental and planned overtime of not less than an hour, cranemen to continue to receive, in addition, payment in respect of "plug money," overtime payment for locomotive men in no case to be less than time-and-a-half; the remainder of the claim was found not established. (15/10/51.)

**No. 34. Rates of Wages of Clerical Workers Employed by the Navy, Army and Airforce Institutes.** Claim: For improved rates and conditions and a grading scheme for clerical workers. Award: Increase on current rates ranging from 3s. at 16 years to 12s. at 21 and over for males, and 4s. 6d. at 16 years to 10s. at 21 and over for females. (15/10/51.)

**No. 35. Method of Compiling Consolidated Time Rates for Workers Employed by an Electrical Engineering Company at Chelmsford.** Claim: That payment to workers under the company's compensatory bonus scheme shall not be taken into account when compiling consolidated time rates in accordance with specified agreement. Award: Claim not established. (19/10/51.)

**No. 36. Rates of Wages of Certain Workers Employed by the Swansea Corporation.** Claim: That basic rates of all non-craft manual workers be increased by 2d. per hour. Award: Claim not established. (19/10/51.)

**No. 37. Claim for Certain Payments in Respect of a Worker Formerly Employed by an Engineering Firm at Clacton-on-Sea.** Claim: For payment in lieu of notice, for holiday payments, and specified rate in accordance with engineering agreement. Award: Payment of 48 hours at 2s. 7½d. per hour, being balance of 44 hours' pay in lieu of notice, but found the rest of the claim not established. (20/10/51.)

**No. 38. Remuneration of Hosiery Workers in Hawick.** Claim: For alteration in cost-of-living bonus scheme. Award Increase of 3s. per week at all stages on the flat rate bonuses for journeymen and journeywomen as set out in the employers' proposals of July 5, 1951. (22/10/51.)

## NATIONAL ARBITRATION TRIBUNAL

### AWARDS

**No. 1720. Terms and Conditions of Employment of Certain Workers Employed by a Civil Air Transport Operating Company.** Claim: Dispute over operation of revised terms and conditions of employment. Award: For employees engaged prior to April 1, 1951, the terms and conditions in the agreement which terminated on March 29, 1950, should apply, but the new agreement should apply to those engaged on or after April 1, 1951. (8/10/51.)

**No. 1721. Rates of Wages and Conditions of Employment of Certain Workers Employed on Leather Production in the Yeovil District.** Claim: For increase of 7½ per cent in wages by the workers, and a contention by employers that terms and conditions of specified national agreements be applied. Award: The Tribunal awarded as follows: (1) the claim for an increase of 7½ per cent was found not established; (2) the terms and conditions of the agreement between the Leather Producers' Association for England, Scotland and Wales and the trade unions should apply subject to the following: (a) a basic rate for skilled timeworkers to be 1d. per hour above national rate, this additional rate to be merged in two stages into any increases in the national basic rate subsequent to February, 1951; (b) that timeworkers in receipt of merit rates continue to receive them in addition to the new basic rates; (c) that the present arrangements for the intake of apprentices agreed between the employers and the union in November, 1950, continue to operate, and payment be as proposed by employers at the hearing on October 11, 1951. (17/10/51.)

**No. 1722. Remuneration of Engineer-Surveyors Employed by Certain Insurance Companies and Underwriters (Award No. 1657).** Claim: For certain specified salary scales. Award: The Tribunal awarded as follows: (a) that an engineer-surveyor shall, on transfer to head office staff, receive a salary not less than £100 in excess of that provided by Award No. 1657, and after five years' service as head office engineer, a salary of not less than £125 in excess of the corresponding salary in Award No. 1657; (b) Head office engineers working in London to receive 5 per cent above the new salary rate; (c) Head office engineers who, on January 1, 1951, had completed 10 years' service as engineer-surveyor or head office engineers, and were at that date receiving above £800 (London) or 775 (provincial) to receive an equal increase above the new salaries of £918 15s. and £875 by this award. (18/10/51.)

# THE MONTH'S DATES

**British Institute of Management**

December

4-7 Management Conference on Foremanship. (In conjunction with Pendley Manor.)

11 "Modern Management in an Old-established Industry." W. V. Sheppard. London. 5.30 p.m.

**Carlisle and District Management Association**

11 "Ethics in Industry." The Rt. Rev. The Lord Bishop of Carlisle.

**Chartered Institute of Secretaries**

5 "Education for Management." F. W. Oakley, M.A., LL.B. Council Chamber, Liverpool Chamber of Commerce. 6.45 p.m.

14 "My Fellow Men in Industry." R. B. Simpson. Imperial Hotel, Temple Street, Birmingham. 6.15 p.m.

**Industrial Welfare Society**

3 "Personnel Management—Works and Office Executives. W. May. London. 6 p.m. (Course.)

3-7 "Human Relationships in Industry." (Executives' Course.) London.

4 "Superannuation Schemes—Transferability of Pensions." London. 2.30 p.m.

6 "Physical Working Conditions—for Works and Office Executives and Welfare Officers." Dr. T. Bedford. London. 6 p.m. (Course.)

6 "How to Make Communications Really Effective." London. 6 p.m. (Course.)

7-10 Conference for Workers' Representatives. Hydro Hotel, Llandudno.

10 "Personnel Management—Works and Office Executives." J. Marsh. London. 6 p.m. (Course.)

11 "What We are Doing in Our Company About Works Discipline." G. E. Fish and J. H. Leatherland. London. 2.30 p.m.

13 "How to Make Communications Really Effective." London. 6 p.m. (Course.)

13 "Physical Working Conditions—Works and Office Executives and Welfare Officers." E. P. T. Gage. London. 6 p.m. (Course.)

11-17 Conference. Dunblane Hotel Hydro.

**Institute of Industrial Administration**

4 "Can Management Thinking Be Taught?" J. H. Hilton. London. 7 p.m.

7 "The Presentation of Annual Accounts in Simplified Terms for Employees." S. C. Roberts. Manchester. 7 p.m.

11 "Job Evaluation." L. Godber. 7 p.m. "Psychological Aspects of Industry and Commerce." Rev. G. Needham. 7.45 p.m. Sheffield. (Students' evening.)

11 "Good Industrial Relations—Whose Responsibility?" Wolverhampton. 7.30 p.m.

12 "Impressions of the American Chemical Industry." E. A. Harvey. Derby. 7.15 p.m.

December

13 "The Human Factor in Industry." C. A. Oakley. Warrington. 7 p.m.

13 Management Brains Trust. Southampton. 7.30 p.m.

13 "Report of the Productivity Team on Structural Engineering." G. S. Gowland. Middlesbrough. 7.30 p.m.

**Institute of Industrial Supervisors**

5 "American Foremanship Report." W. J. Izzard. College of Technology, Suffolk Street, Birmingham. 7.30 p.m.

5 "Education for Management." Bristol University. 7.30 p.m.

5 "Management and Supervision." S. Waugh. County Mining and Technical School, Nuneaton. 7.30 p.m.

6 "The Effect of Costs Upon Industrial Supervision." F. M. W. Hird. Great Northern Hotel, Leeds. 7.30 p.m.

6 "The Century of the Foreman." Miss Patricia Hall. The Polytechnic, Regent Street, London, W.1. 7.30 p.m.

6 "The Foreman and Work Study." S. W. Holman. Canteen, Guest, Keen and Nettlefolds Ltd., Wednesbury. 7.30 p.m.

13 "Costing Incentives and the Foreman." Wm. C. Scott. Royal Technical College, Glasgow. 7.30 p.m.

13 "Problems in Large-scale Organisation." J. W. Grady. The Polytechnic, Woolwich, London, S.E. 6.30 p.m.

**Institute of Personnel Management**

2-7 "Industrial Relations." St. Ermin's Hotel, Caxton Street, London, S.W.1.

3 "Who Suffers Most if an Irresponsible Schoolchild Becomes a Cog in the Industrial Machine?" Brother Ronald, Society of St. Francis, Coventry.

3-7 "Industrial Relations." London. (Course.)

4 "Supervision and the Art of Communication." R. Ratcliffe. Nottingham.

6 Discussion Meeting for Special Groups. London.

10 "Films as a Contribution to Supervisory Training." J. Marsh. Glasgow.

11 "Good Industrial Relations—Whose Responsibility?" Dr. C. H. Northcott. Wolverhampton. 6.30 p.m.

12 "What the Employee Expects from the Personnel Department." J. Garland. Edinburgh. 7.30 p.m.

13 "Motives for Production—Private Gain, Public Service and the Third Alternative." Prof. C. A. Mace. London. 7 p.m.

**Institution of Production Engineering.**

5 "Production Engineering as a Career." T. B. Worth. Westinghouse Brake and Signal Co. Ltd., Chippenham. 7.30 p.m.

6 "Mechanical Handling and Work Movement." J. Bright. School of Metalliferous Mining, Camborne. 7.15 p.m.

**Institution of Works Managers.**

1 "Some Modern Concepts of Management." A. Roberts. Grand Hotel, Sheffield. 7.30 p.m.

4 "Productivity in the Shoe Trade." F. G. Bailey. College of Technology, The Newarke, Leicester. 7 p.m.

6 "Work Study." W. K. Hall. Vane Arms Hotel, Stockton. 7.30 p.m.

10 "Motion Study." Miss A. G. Shaw. Franklins Gardens Hotel, Northampton. 7.30 p.m.

11 "A Works Engineer's Attitude to Works Responsibility." L. R. Perkins. Grand Hotel, Birmingham. 7.0 p.m.

11 "The Profession of Management." A. M. Hudson Davies, O.B.E. Adelphi Hotel, Liverpool. 6.30 p.m.

11 "Productivity." Discussion and film show. Starkie House, Starkie Street, Preston. 7 p.m.

11 "Management at the Crossroads." E. V. Ward. Crown Hotel, Huddersfield. 7.30 p.m.

**National Institute of Industrial Psychology.**

3-7 Course in Selection Methods. London.

4-5 Course for Supervisors. (Office). London.

10 Conference on Supervisor Training. Norwich.

11-12 Course for Supervisors. Cambridge.

14 Conference of N.I.I.P. Trained Interviewers. London.

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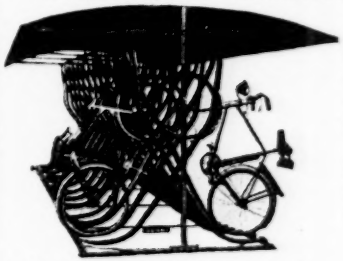

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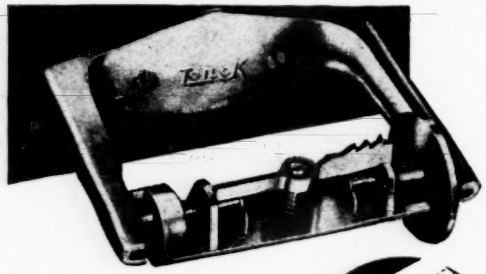

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